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CHRISTO ET ECCLESIAE
The Gift of
The Honorable
George W. Bull,
of Buffalo, N.Y.
3 April, 1872.

Yours Respectfully

Samuel Tuthill M.D.

TRANSACTIONS

WITH RESPECTS OF

G. W. BULL,

OF THE

SENATE, ALBANY.

ECLECTIC MEDICAL SOCIETY

OF THE

STATE OF NEW YORK

For the Year 1871.

TRANSMITTED TO THE LEGISLATURE JANUARY 30TH, 1871.

ALBANY:
THE ARGUS COMPANY, PRINTERS.
1871.

1872, April 3.
Gift of
Hon. George W. Bull,
of Buffalo, N.Y.

STATE OF NEW YORK.

No. 84.

IN ASSEMBLY,

January 30, 1871.

TRANSACTIONS

OF THE ECLECTIC MEDICAL SOCIETY OF THE STATE OF NEW YORK.

Hon. WILLIAM HITCHMAN,

Speaker of the Assembly:

SIR.—We have the honor to transmit to you, as required by law, the Transactions of the Eclectic Medical Society of the State of New York, for the present year.

Very respectfully,

Your obedient servants,

SAMUEL TUTHILL, M. D.,

President.

J. EDWIN DANELSON, M. D.,

Corresponding Secretary.

ALBANY, *January 27th*, 1871.

ECLECTIC MEDICAL SOCIETY OF THE STATE OF NEW YORK,
ALBANY, *January* 27, 1871.

The papers and communications which accompany the journal have received the approval, as published, of the Committee of Publication.

SAMUEL TUTHILL,
ALEXANDER WILDER,
JAMES M. COMINS,
Committee.

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ECLECTIC MEDICAL SOCIETY.

OF THE

STATE OF NEW YORK.

CONSTITUTION.

Whereas the Legislature of the State of New York, at its eighty-eighth session, did pass a law entitled "An act to incorporate the Eclectic Medical Society of the State of New York, and auxiliary local Medical Associations," approved April 24th, 1865, in the words following:

AN ACT for the incorporation of the Eclectic Medical Society of the State of New York, and auxiliary local Eclectic Medical Associations.

PASSED April 24, 1865.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

SECTION 1. Robert S. Newton, of the city of New York, A. W. Russell of Albany, Benjamin F. Arnold, of Pawling, Dutchess county, Calvin S. Totman, of Syracuse, William W. Hadley, of Brooklyn, D. E. Smith, Jacob Van Valkenburgh and their associates, are hereby declared to be a body corporate and politic, by the style and name of the Eclectic Medical Society of the State of New York, and by that name shall be in law capable of suing and being sued, pleading and being impleaded, answering and being answered, defending and being defended in all courts and places, and in all matters and causes whatsoever, and shall have and use a common seal with authority to alter and renew the same at pleasure.

§ 2. The said society shall hereafter be composed of members duly chosen as its by-laws shall direct; and at its annual meetings, the members in attendance, not less than fifteen in number, may elect a

president and such other officers as may be deemed proper, who shall hold their offices for one year, and till others shall be chosen in their places. It shall be lawful for said society to purchase and hold real property for its use, not exceeding in value the sum of twenty thousand dollars.

§ 3. The recording secretary shall file in the office of the secretary of state a copy of the constitution and by-laws of said society, and a copy of the journal of the proceedings had at the first meeting held after the passage of this act; he shall also provide a book in which he shall record all the resolutions and proceedings which may be had from time to time, also the name of every member of the society, his residence and the time of his admission into the society, and also the annual and other reports relative to the condition of the treasury, and all such other matters a majority of the society shall deem proper. It shall be lawful for any member of the society, at all times, to have recourse to this book, and it shall be delivered, together with all books, papers and records, which may be in the hands of the secretary and the property of the society, to his successor in office. He shall also, in the month of January in each year, make a report to the Legislature, embracing the journals, records of scientific discoveries, and other papers upon medical or surgical subjects which may be prepared under the directions of the society.

§ 4. It shall be lawful for physicians who subscribe to the constitution of the Eclectic Medical Society of the State of New York, to meet together in each of the counties of the State, or in other localities to be specified in their call for such assemblage, and organize medical societies for the county, district, or locality in which they reside, subject to the approval and sanction of the aforesaid State society. Such societies, when so organized and sanctioned, shall elect a president and other officers, and shall file in the office of the clerk of the county where such meeting shall be held, a copy of the constitution, by-laws and proceedings held at such meeting.

§ 5. All the powers, privileges and immunities now conferred by law upon the State Medical Society and the State Homœopathic Medical Society, and upon the county medical societies and upon the county homœopathic medical societies, except granting the degree of doctor in medicine, are hereby conferred upon the several societies incorporated pursuant to this act, and the said societies shall be subject to the duties and responsibilities to which State and county medical societies are subject under the laws of this State.

The undersigned, being duly associated and become a corporation, pursuant to said act, by the name and style of "The Eclectic Medical Society of the State of New York," have adopted the accompanying code of by-laws; and in order to declare, without equivocation, the cardinal doctrines and usages by which we are distinguished, do each and severally subscribe and set forth the following

Platform and Declaration.

The life itself, the principle often called "the healing power of nature," is the sole force capable of removing disease, and maintaining the conditions of health. The physician is, therefore, the minister and auxiliary of nature; and it is his vocation to know and apply remedial agents which conform exactly to the laws of life, and aid the physical system to relieve itself of morbid elements, and recover the normal performance of its functions.

We accordingly reject, as medicines, those agents or substances which are known to be baleful and poisonous in their character, having for their use no necessity or adequate justification, and exclude from our catalogue of remedies, wholly and unqualifiedly, blood-letting, the several compounds and preparations of mercury, arsenic, antimony and lead; while, in the present imperfect condition of medical knowledge, we accept and retain other agents, chiefly inorganic, which are, nevertheless, open to objection. At the same time, we hope to be enabled eventually, as new discoveries and applications of medicines are learned, to use only remedies which are wholly salutative and efficient, being derived from the organic world, and so acquiring their virtues from the operations of the mysterious principle of life which permeates them.

We believe that knowledge makes its possessors liberal and fraternal, and not partisan or exclusive. We accordingly accept no code of ethics which is in conflict with the golden rule, "Whatsoever ye would that men should do to you, do ye even so to them." Nor can we esteem any information lightly, however it may have been contributed which shall enable us in any way to be more useful in our vocation. The art of healing, like civilization itself, is daily improving, expanding, and becoming more perfect.

We accordingly extend the right hand of fellowship to all persons sympathizing with our purposes, and sharing with us the love of knowledge and *Hygienic Medication*.

BY-LAWS

Of the Eclectic Medical Society of the State of New York.

ARTICLE I.

SECTION 1.—*Membership*—This Society shall consist of the present membership, those whose names are upon the record of the organization known as the Eclectic Medical Society of the State of New York, and the number may be increased to three members from each county in the State, except New York and Kings, which shall be entitled respectively to twelve members from each county, who shall constitute the Society, till the annual session in the year 1866, after which the Society may add to its membership annually, five each from the New York and Kings county societies, and two from each other county or district society, which is auxiliary to the State Society, who shall have been delegates to the State Society, and been duly nominated by the auxiliary society to which they belong. They shall be elected by ballot, when they shall become members by signing the constitution and by-laws, and paying an initiation fee of five dollars each. If three or more ballots appear against a candidate, he shall be rejected. These shall constitute the permanent members of the Society.

§ 2. Delegates, to the number of four, from each auxiliary society, except New York and Kings, which are entitled to ten respectively, and two from each eclectic medical college in the State, are admitted to each annual session of the Society, and entitled to all the rights and privileges of the permanent members, and are allowed to vote upon all questions before the meetings, except upon the election of officers.

ARTICLE II.

SECTION 1.—*County Societies*—County, and other sectional societies, whose purposes are in unison with this, may be organized upon call of any member of this Society, who is a resident of the county or district in which the call is made, subject to the approval and sanction of this Society, and which, when duly organized, shall be auxiliary to the State Society, and be entitled to send four delegates, except the county societies of New York and Kings, which may respectively send ten delegates, and each eclectic medical college in the State may send two delegates to each annual session, and shall contribute annually five dollars to the State Society.

Such societies, when organized and sanctioned, shall elect a president and other officers, and shall file in the office of the clerk of the county, where such meeting shall be held, a copy of the constitution, by-laws and proceedings had at such meeting.

§ 2. Such societies may hold stated meetings as often as they see proper, present papers and hold discussions upon medical or surgical subjects, and transact such other business as may be necessary, and all medical papers so presented shall become the property of the State Society, and be sent to the Secretary for publication in its annual transactions; also, a list of the officers and members of the said county or district society, for the same purpose.

Article III.

Section 1.—*Election of Officers*—At each annual meeting the Society shall elect, by ballot, a President, Vice-President, Recording Secretary, Corresponding Secretary, Treasurer, and Librarian, who, by virtue of their offices, shall constitute a Board of Directors, to whom shall be intrusted the corporate affairs and general business of the Society, when it is not in session. There shall also be elected eight censors, one from each judicial district in the State. The election of all officers shall be decided by a plurality of votes after the first formal ballot, if that ballot fails to elect by a majority, and they shall continue in office till their successors are chosen.

Article IV.

Section 1.—*Duties of Officers*—The President shall exercise the functions usually pertaining to presiding officers in deliberative bodies and incorporated associations. He shall deliver, or designate some one to deliver, an address at the annual and semi-annual meetings of the Society, and appoint essayists to prepare papers for such meetings.

§ 2. The Vice-President will perform the duties of the President when the latter officer is absent from the chair.

§ 3. The Recording Secretary shall keep a record of the proceedings of the Society, receive all moneys, and pay the same to the treasurer, sign all credentials and certificates of membership, and issue notices of regular meetings, and cause one to be sent to each member, and the president of each auxiliary society, annually report the amount of money received and disbursed, together with such other items as may be of interest to the Society.

§ 4. The Corresponding Secretary will assist in keeping the minutes of the Society, and conduct and have charge of all correspondence of the Society.

§ 5. The Treasurer shall receive and have charge of all moneys belonging to the Society, and pay all bills, but only such as have been audited by the Board of Directors, and annually submit his report to the Society. If required, he shall execute to the Board of Directors sufficient bonds and security for the faithful performance of his duties.

§ 6. The Board of Directors shall have power to fill all vacancies, audit all bills, procure a seal, secure suitable rooms for the accommodation of the Society, and transact such other business as may be necessary, when the Society is not in session.

ARTICLE V.

Meetings.—The annual meetings of this Society shall be held on the fourth Wednesday of January in each year, at such place as the Society shall from time to time appoint.

ARTICLE VI.

Quorum.—Fifteen members may constitute a quorum of the Society. Three Directors may constitute a quorum of the Board, provided each director shall have been notified of the time and place of meeting.

ARTICLE VII.

Certificate of Membership.—A certificate of membership may be issued by the Board of Directors, and a copy bearing the signature of the President, Vice-President and Secretary, and seal of the Society, furnished to each member, on the payment of five dollars for the same.

ARTICLE VIII.

Qualifications of Members.—The Censors shall examine candidates for membership, which candidate may be a "Doctor of Medicine," a practitioner who has sustained a reputable practice for four years, and whose character for intelligence, virtue and patriotism is without reproach, and is eligible according to section one, article one, of the by-laws, and duly nominated by the district society to which he belongs.

Article IX.

Honorary Members.—The Society shall have the privilege of electing annually not more than six eminent physicians as honorary members, who shall have been duly nominated at the previous annual meeting, and who shall be non-residents of the State. (But six may be elected at the annual meeting in 1866, who shall not have been nominated a year previous.)

Article X.

Expulsion of Members.—Any member may be officially censured, invited to withdraw, or be expelled from the Society for improper or unprofessional conduct, by a vote of four-fifths of the permanent members present at a regular meeting, provided that a specific charge has been made in writing, and the accused duly notified thereof.

Article XI.

Amendments.—Proposals to alter or amend the constitution, or by-laws, shall be presented in manuscript, and read at a regular meeting, when it shall lie over until the next annual meeting, unless there is a unanimous desire to act upon it immediately; but no alteration shall at any time be made, except by a vote of two-thirds of all the members present.

Article XII.

Order of Business.—1. Calling the roll of members and delegates.
2. Reading the minutes of the last meeting.
3. Proposals for membership.
4. Reports of officers.
5. Reports of committees and action on the same.
6. Reading of papers and discussion of the subjects presented.
7. Miscellaneous business.
8. Adjournment.

Article XIII.

Dues.—At each annual meeting of the Society, the members shall pay to the secretary two dollars each, as annual dues. If such dues are not paid for three years, the member in default shall be suspended from the Society until he shall have paid such accrued dues.

CODE OF ETHICS OF THE ECLECTIC MEDICAL SOCIETY OF THE STATE OF NEW YORK.

ADOPTED MAY, 1865.

ARTICLE I.

The interests and rights of medical men are as dear to them, as are those of any other class of citizens in this Union to themselves; they are entitled by the Constitution of this republic to the same freedom and privileges in moral, social, political and civil life, as are individuals pursuing any other vocation; and any association or rules which would deprive them of the least portion of these rights and privileges, are unwarranted usurpations, contrary to the spirit and intent of our government, and, consequently, of no force in law or custom.

ARTICLE II.

The common rules and maxims of morality which are enjoined in the Bible, and have been recognized by the wise and virtuous at all times, and in every civilized country, are comprehensive enough in their scope, to meet all the contingencies and emergencies which, in a moral point of view, are likely to arise in the transaction of business and the interchange of thought and sentiment between man and man.

ARTICLE III.

Medical men have an undoubted right as any other class of men to bring themselves and their claims before the public by every fair and honorable means. They may enter into general or special practice as they may consider best adapted to their interests, or to their peculiar views; they may introduce themselves to the notice of the public by printed cards or other publications, by public or private lectures, or by the publication of certificates of cures actually performed. But while it is clearly the right of the physician to thus present himself in a truthful, modest manner before the community, as a candidate for patronage, everything like boasting of self-adulation, all efforts at fulsome display which evince a purpose to excite the wonder of the people and lead them to anticipate what probably cannot be realized, and show at the same time on the part of the advertiser an unwillingness to trust his claims for public favor upon the simple truth, are highly disgusting to every right-minded person,

and are entirely unprofessional. The presence of laymen at surgical operations, is by no means objectionable if both the patient and operator consent, as it tends to make the ability of the operator better known in community, affords an incentive for medical men to perfect themselves in professional skill, and cultivates a feeling of confidence on the part of the public which will lead them to seek for medical aid among the members of the profession instead of among those who, professing to practice medicine, are ignorant of its true principles.

ARTICLE IV.

Attendance upon the poor without charge is certainly a Christian charity, for the doing of which no fault can be found with any one; yet in relation to this subject, as well as to contracts between patients and medical men, the laws and business customs of the country afford all the protection, and allow all the privileges which are necessary, and of which the physician has an undoubted right honorably to avail himself; being only careful, however, not to interfere with the claims which the profession generally hold upon him, for its security individually and collectively, by rendering professional services for less than the customary fees of his medical brethren who may be located in his neighborhood. If a physician candidly believes that he can effect a cure in any given case presented to him for treatment or advice, it is not only his right but his duty to so inform the patient seeking his advice.

ARTICLE V.

A medical man having invented any surgical instrument, or discovered any new and valuable medicine, it becomes his capital, and there is nothing unprofessional in his obtaining a patent for the same; if it is right for our government to issue patents to her citizens, it is equally right for them to hold patents; and if it is not right, in either case, no particular persons or associations are exactly authorized to arraign the American government and her citizens for trial, and sit in judgment upon them. A physician may, in his own practice, employ a medicine or compound known only to himself; it is his capital, and there is no law in the country which can compel him to divide his capital among others by disclosing his remedy, save his own benevolence and philanthropy. He may also employ in his own practice any remedy of whatever character it may be, when the formula for its preparation is made known to him, and he deems it a

useful medicine; nor does the fact of such formula being made known to him demand that he shall reveal it to others, unless by permission of the person to whom it actually belongs; honor, at least, forbids such a treacherous revelation. But while no person is under obligation to make public all the formulas of his own practice, and while no practitioner should ever prescribe a remedy the composition of which he does not understand, it is certainly unjustifiable, unbecoming and unprofessional in any medical man to send out, to be purchased and indiscriminately used, medicines, whether patented or not, of the character and application of which the purchasers are as ignorant as they are of the physiology and pathology of the human body.

Article VI.

No person can be considered a physician who has not by collegiate attendance or otherwise, made himself acquainted, at least practically, with the departments of anatomy, physiology, surgery, materia medica, theory and practice, obstetrics and chemistry. Yet even among physicians thus recognized, there may be a great diversity of opinion upon specific medical matters; yet no physician should be slighted or treated discourteously because of such differences. Freedom of speech and of thought, originally bestowed upon man by his Creator, are guaranteed to him by our government, and to refuse to recognize a physician, or to reject fellowship with him, because of differences of opinion upon non-essential medical or other matters, is anti-republican, narrow, illiberal and selfish.

Article VII.

The professional man should seek to combine in his character: 1. A thorough acquaintance with his profession; 2. Integrity, or unbending adherence to moral principle; 3. Self-respect, or a modest appreciation of what he is, and what he deserves; and, 4. Benevolence, or a generous consideration of the interests and feelings of his fellow men. These elements combined in the foundation of his character, and fully developed in his life, will constitute any man a true gentleman, and entitle him to a place in the highest ranks of moral excellence.

Article VIII.

With respect to the duties of physicians to their patients, ever bearing in mind the great responsibility resting upon them in the

discharge of their profession, physicians should always display a promptness and willingness in attending to the calls of the sick; by this course they may not only be enabled to check disease at its commencement, but will also secure the confidence of patients and their friends, which, as every physician knows, is a very important point taken in connection with the treatment. Gentleness and kindness, with firmness, is the proper course to pursue with patients and their friends, yielding to the wishes of others whenever this can be done without jeoparding the welfare of the sick, avoiding anything offensive or imperious; always, however, recollecting that the resposibility of the treatment and its result rests solely upon the medical man, who must, as long as a patient is under his professional care, constantly bear this in mind and exercise the proper authority in the matter. The patient belongs to the physician as far as hygienical and therapeutical measures are concerned, until a cure is effected or the physician discharged; and any neglect, inattention, or refusal to follow the directions of the attending physician, or any improper interference, must necessarily relieve the physician from all censure and accountability in case of an unfavorable result originating therefrom.

Patients should be visited by their physicians as frequently as may be necessary to learn the peculiar character and progress of the disease, as well as the influence exerted upon it by the treatment pursued, but great care should be taken not to visit unnecessarily, or too frequently, as this is calculated to alarm patients needlessly and their friends, impair confidence in the physician, and give rise to suspicions of mercenariness.

Patients should not be abandoned because of the incurability of their disease; the attendance of the physician may be the means of relieving them of much suffering and smoothing their progress toward the grave, besides being a source of comfort and satisfaction to friends and relatives.

A physician should, in the sick room, display a degree of cheerfulness consistent with the condition of his patients; he should comfort and cheer up the sick, encouraging them to hope when there are grounds for such encouragement, and manifesting the sympathy and interest he takes in their welfare in a gentlemanly and dignified manner. Levity in the sick room, discussions or conversations concerning matters foreign to the condition or welfare of the sick person, are unprofessional, out of place, and highly censurable.

Misrepresentations of the seriousness of a disease for the purpose of impressing patients and others with the superior skill and ability of one's professional attainments, are wholly unprofessional. But when a disease is really of a serious character, the physician should not delay to apprise the relatives of the patient; and in some cases, in which the physician must employ his own judgment and discretion, the same may be made known to the patient, being careful to do so in a delicate and gentle manner, and always bearing in mind that the life of a patient frequently depends upon the words or manner of the physician in attendance.

In the practice of their profession, physicians frequently have confided to them, or in some other way become acquainted with, secrets of a moral, physical, domestic or other nature, belonging to their patients; these should always be held sacred; never to be referred to by the physician, even in presence of the parties concerned in them, unless these commence the conversation relative thereto; and especially should they not be revealed to any other person by the physician, unless legally compelled to do so, or to clear his own reputation, should it become involved therewith. Neither is it proper or professional for a physician to inform third persons, whether these be medical men or not, of the character of his patient's disease, in all cases, for there are many persons who shrink from having their diseases thus published, however innocent and unavoidable these may be; and such feelings should always be respected.

ARTICLE IX.

Physicians, their wives, their widows, and their children, when under the care and authority of their parents, whether they reside at home or are traveling abroad, should be professionally attended by practitioners in their immediate neighborhood, whenever such attentions are required, without any required payment of fees; yet if a fee or remuneration is offered the attending physician, under proper circumstances, as where the person is wealthy, etc., he should not refuse it lest he impose a pecuniary obligation offensive. In all other cases, the question of demanding and receiving fees rests wholly with the physician.

ARTICLE X.

Physicians should cultivate a friendly feeling among each other, notwithstanding differences of opinion upon medical subjects; and for the furtherance of this object, they should avoid misrepresenting

or slandering any other physician; they should avoid employing any direct or indirect means of destroying a patient's confidence in them, or of improperly securing the patronage of another's patients to themselves. They should, however, render their professional services to the patients of other physicians when these last request it, with or without fee, as may be agreed upon, and without seeking to supplant the regular attending physician; and if called upon to attend a case in the absence, from sickness or other cause, of the attending physician, they should at once yield the case to the physician upon his arrival or recovery unless the patient, patient's relatives, or physician request otherwise. The fees for all professional services rendered, unless otherwise agreed upon, should be paid to the person performing such services.

It is imprudent for a physician to visit the patient of another physician, unless with the approval of the latter, as it may give rise to unjust suspicions and create jealousy and ill feeling; but when a patient, under the charge of one physician, requests the visits of another for the purpose of ascertaining his views of the disease with which said patient is afflicted, such visit should be made; and the physician, although bound to express his opinion fairly and candidly should be extremely careful of the reputation of the attending physician; and all such visits should be paid for upon the spot.

In all cases of accidents, sudden attacks of disease, etc., several physicians are frequently sent for; in such cases, in the absence of the regular attending physician of the patient or patients, the case or cases belong to the physician who first arrives, who should select, when this is necessary, from the others present, such assistance as he may require. The fees for such cases should be paid as promptly as possible.

The fees for professional services should be regulated in every city, town, village or county, by the resident physicians of such places, and an adherence to them will tend much to establish confidence and harmony; but when a physician attempts to secure or monopolize a practice, by infringing upon the rights of others, as manifested, for instance, in rendering professional services for fees below those which are customary or tacitly agreed upon by the medical practitioners of his neighborhood, city or town, etc., his fellow physicians may, with good reason, cease to affiliate with him any longer on account of such unprofessional conduct.

Whenever a patient becomes dissatisfied with his attending physi-

cian, and desires to dismiss him and employ another, he has a perfect right so to do, and the physician sent for may accordingly render his services to said patient; and this action of the patient and physician should not destroy the amicable relations existing between all the parties. But no physician should attend the patient of another, unless the two be in mutual attendance, until the previous physician has been formally dismissed.

ARTICLE XI.

In case of rare, obscure, eccentric or dangerous diseases, consultations are often required, and frequently prove advantageous to the patient. As the object of a consultation is the welfare of the patient, physicians have the right to consult with whomsoever they choose, whether medical men or not. At such consultations, they may candidly express their views, advise as to the course to be pursued, and prescribe, if requested; for which, of course, a fee should be demanded.

Consultations should never be held in the presence of the patient, but in some private place; and the presence of a relative during the consultation should not be objected to when this is requested, as it serves to satisfy that the physicians are really occupied with the patient's good, and tends to remove doubts and gain confidence.

When the consultation is between medical men, the attending physician should state his views first; and, afterward, should more than one be in the consultation, they will express their several views according to their age, commencing with the youngest physician first. When the selection of the consulting physicians rests upon the medical attendant, to avoid confusion, he should prefer those whose general medical opinions are the most in harmony with his own.

When, after a consultation, subsequent attendance of the consulting physician is requested in connection with the original attendant, it would be extremely imprudent, to say the least of it, for a physician to grant this request unless the original attendant be a graduate, or a non-graduate practitioner of four years reputable practice. To do otherwise, might lead to mortifications, misrepresentations, etc., which would seriously affect the reputation and patronage of the physician. However, in all these instances, much must be left to the circumstances of the case, and to the judgment and discretion of the physician.

When two or several physicians are attending a patient, they

should at each visit agree upon the treatment to be pursued, and a time to meet again; and they should observe the greatest punctuality in their visits. But if, from any cause, any of them should fail to be present at the appointed meeting, after a reasonable time, the previous treatment should be continued by the physician or physicians present, until the next meeting of the attendants. But in all cases of emergency, or where the condition of the patient is such as to demand it, any one of the attending physicians may change the treatment, of which he should notify the others at as early a period as possible, and at their next meeting explain his reasons for so doing. However, an unnecessary interference in the general treatment agreed upon, and clandestine or uncalled-for visits to the patient, are reprehensible, and should lead to the dismissal of the offending individual.

When physicians attending a patient cannot agree upon the disease or the course to pursue, they may, by the consent of the patient or of his kindred, call in other medical assistance; or the patient, or his kindred, on being informed of the character of the disagreement, may discharge and retain such of the attendants as they choose, without the imputation of an offense or an unkindly act; for in these matters, patients and their kindred have their rights equally with the physician.

In all other matters pertaining to physicians in their duties to their patients, the public and themselves, an observance of the ordinarily recognized rules of truth, veracity, justice and honor (a part of which rules it has been the endeavor to introduce into this code), should be rigidly observed.

Members of the Eclectic Medical Society of the State of New York, with Residence and Date of Admission.

October 13, 1863.

Wm. Jones, M. D.	Newburgh, N. Y.
Henry S. Firth, M. D.	Williamsburgh.
Benjamin J. Stow, M. D.	Brooklyn.
Dennis E. Smith, M. D.	do.
James T. Burdick, M. D	do.
William W. Hadley (deceased)	Williamsburgh.
Robert S. Newton, M. D	New York.
Jacob Van Valkenburgh, M. D	Charleston Four Corners.
Lyman Stanton, M. D. (deceased)	Copenhagen.
E. J. Mattocks, M. D.	Chicago.

R. H. Owen, M. D. ..... Haverstraw.
Robert Hamilton, M. D. ..... Saratoga Springs.
C. T. Greenleaf, M. D ..... Brewerton.
H. Ransom Gray, M. D. ..... Hudson.
Harmon Pease, M. D. ..... Schenectady.
Jonah A. Martin, M. D. ..... Troy.
Andrew W. Russell, M. D. ..... Albany.
Horatio E. Firth, M. D. ..... Brooklyn.

January 13, 1864.

Amos Stoddard, M. D. ..... Naples.
Lewis C. Silvernail, M. D. ..... Harpersfield.
Noah S. Dean, M. D. ..... Albany.
Thomas L. Harris, M. D. ..... Cazenovia.
Wm. D. Thayer, M. D. ..... Fabius.
A. B. Westcott, M. D. ..... Little Falls.
Elisha S. Preston, M. D. ..... Rochester.
G. W. Taylor, M. D. ..... Schenectady.
John Wheeler, M. D. ..... West Fulton.
J. S. Holland, M. D. ..... Sandy Hill.
Chas. K. Brown, M. D. ..... Troy.

June 8, 1864.

Benj. F. Arnold, M. D. ..... Pawling.
Thos. R. Frazer, M. D ..... Halifax, N. S.
Samuel Tuthill, M. D. ..... Poughkeepsie.
H. M. Sweet, M. D. (deceased) ..... New York.
George Newby, M. D. ..... New York.
Robt. L. Hamilton, M. D. ..... Brooklyn.
James Wilson, M. D. ..... Owego.
P. A. Johnson, M. D ..... Waverly.
R. B. Griswold, M. D. ..... Banksville.
C. W. Bates, M. D ..... Hempstead, Queens P. O.
Henry Hallembaek, M. D ..... Burlington, N. J.
Joseph Sites, M. D. ..... Philadelphia, Pa.
Wm. Clark, M. D ..... do
Wm. F. Smith, M. D. ..... do
John Buchanan, M. D. ..... do
Orin Davis, M. D ..... Attica, N. Y.

January 18, 1865.

P. S. Stearns, M. D..... Owego.
J. M. Harding, M. D..... Oil City, Pa.
Thomas Robens, M. D. ..... Quaker Springs.
Chas. Brown, M. D..... East Avon.
J. J. Sharp, M. D..... Tuscarora.
Geo. H. Preston, M. D..... Dansville.
Calvin S. Totman, M. D..... Syracuse.
R. P. Crandall, M. D..... Greene.
J. G. Fross, M. D..... Syracuse.
Jesse Watson, M. D..... Fulton.
Frank D. Gridley, M. D..... Whitney's Point.

June 14, 1865.

G. V. Armington, M. D..... Farmington.
H. S. Dimock, M. D..... Phelps.
Wm. H. Hawley, M. D..... Potter Center.
F. C. Hawley, M. D..... Middlesex.
J. A. Hawley, M. D. ..... Canandaigua.
D. Richards, M. D. ..... Marion.
L. A. Ward, M. D..... Hornellsville.
Henry Esten, M. D..... Sparta.
Jona. Howard, M. D..... Linden.
Joel C. Hulbert, M. D..... Livonia.
Seth Easton, M. D..... Ontario.
Rowell Thomas, M. D..... Rockport.
M. M. Fenner, M. D..... Fredonia.
C. L. Harding, M. D ..... Nunda.
B. P. Backus, M. D..... Northampton, Mass.

June 13, 1866.

Herman Boskowitz, M. D..... Brooklyn.
A. P. Parsons, M. D..... Forestville.
L. H. Bone, M. D. ..... New York.
Daniel A. Chase, M. D..... Cambridge.
James C. Humphrey, M. D..... Little Falls.
Walter D. Jones, M. D..... Newburgh.
Alvin R. Edson, M. D..... Greenwich.
H. C. Taylor, M. D..... Brocton.
D. Wilcocks, M. D. ..... Brooklyn.

H. C. Gazlay, M. D..... Cortland.
G. E. Lawrence, M. D. ..... Smyrna.
M. Hermance, M. D. ..... Brooklyn.
Luman B. Hoag, M. D..... Brewsters.
Edwin Freeman, M. D..... Cincinnati, Ohio.
A. B. Whitney, M. D..... New York.

June 12, 1867.

Wm. R. Hayden, M. D..... New York.
George L. Whitcomb, M. D..... Fredonia.
James N. Betts, M. D..... Pulaski.
George W. King, M. D..... Saratoga Springs.
J. Y. Tuthill, M. D..... Brooklyn.
John A. Rega, M. D..... Belleville.
Chas. T. Hart, M. D. (deceased)..... New York.
Orrin Ford, M. D. ..... Saratoga Springs.
Paul W. Allen, M. D. ..... New York.

January 15, 1868.

John Horton, M. D..... Brooklyn.
O. L. Southworth, M. D. ..... Leonardsville.
James J. Westcott, M. D..... Norwich.
James M. Comins, M. D. ..... New York.
Henry C. Cooper, M. D..... Brooklyn.
J. A. Salisbury, M. D..... Corry, Pa.
Maria B. Hayden, M. D. ..... New York.

June 24, 1868.

Josiah Arnold, M. D..... Auburn.
Frank B. Davis, M. D..... Amber.
C. C. Johnson, M. D..... Gowanda.
A. D. Brooks, M. D. ..... Irving.
A. B. Haywood, M. D..... Lowell.
C. D. Thompson, M. D..... Allegany.
W. C. Coburn, M. D..... Buffalo.
R. V. Pierce, M. D..... do
E. E. Salisbury, M. D..... McGrawville.
J. Edwin Danelson, M. D. ..... Little Falls.
E. F. Chaney, M. D. ..... Liverpool.
B. M. Genung, M. D..... Brewerton.

J. B. Chapman, M. D..... South Richland.
W. H. Bowlsby, M. D.*..... Brooklyn.

January 27, 1869.

P. A. Morrow, M. D..... New York.
O. H. Simons, M. D..... Jamestown.
B. J. Aylworth, M. D..... Oxford.
Sylvester Roe, M. D..... Sag Harbor, L. I.
H. L. Sweet, M. D..... Cambridge.
A. E. Jacobson, M. D..... Brooklyn.
Rollin J. Burton, M. D..... Albany.
Wm. B. Warner, M. D..... Brooklyn.
James Day, M. D..... New York.
H. D. Gross, M. D..... Ballston Springs.
J. M. F. Browne, M. D..... New York.
R. E Kunzé, M. D..... do
John H. Fitch, M. D..... do
Alexander Wilder, M. D..... do
E. P. Huyler, M. D..... do

June 23, 1869.

Chas. Archer, M. D..... New York.
W. B. Preston, M. D..... Dansville.
N. F. Marsh, M. D..... Ellington.
Joseph R. Buchanan, M. D..... New York.

January 26, 1870.

B. F. Chapman, M. D..... Brooklyn.
E. Allen, M. D..... Copenhagen.

June 15, 1870.

James Tyler, M. D..... Parma.
Byron Preston, M. D..... Albany.
William Bell, M. D..... Honeoye.

January 25, 1871.

A. L. Purdie, M. D..... Otselic.
N. Bedortha, M. D..... Saratoga Springs.
John H. Dye, M. D..... Galway.
G. W. Carpenter, M. D..... Forrestville.

* Expelled.

Helen A. Goodspeed, M. D.	Brooklyn.
H. E. Finkle, M. D.	Rensselaer county.
John H. Johnson, M. D.	New York.
T. Van Skellyne, M. D.	Williamsburgh.

HONORARY MEMBERS.

J. Wesley Johnson, M. D.	Hartford, Conn.
John King, M. D.	Cincinnati, Ohio.
John M. Scudder, M. D.	do
Lorenzo E. Jones, M. D. (deceased)	do
O. E. Newton, M. D.	do
William R. Prince, M. D. (deceased)	Flushing, N. Y.
Horation G. Newton, M. D.	Maine.
Walter Burnham, M. D.	Massachusetts.
John Stow, M. D.	do
Joseph R. Buchanan, M. D. (permanent member)	Syracuse, N. Y.
James M. Comins, M. D. (permanent member)	New York City.

TRANSACTIONS

OF THE

NINTH ANNUAL MEETING OF THE ECLECTIC MEDICAL SOCIETY FOR THE YEAR, 1871.

The Eclectic Medical Society of the State of New York, held its ninth annual meeting, at the City Hall, at Albany, on Wednesday and Thursday, the 25th and 26th days of January, 1871.

At the hour of ten, January 25th, the Society was called to order by the president, Dr. Alexander Wilder, M. D., of the city of New York.

Prayer was offered by Rev. Elias Buck, of Niagara Falls.

The president then addressed the Society at length, assuring the members of its increasing prosperity, and the augmented popularity of the reformed practice of medicine. From being a feeble body, it has become one of the most respectable denominations. Its materia medica is rapidly entering the domain of the other schools, and superseding the medicines heretofore employed. The ablest medical men and journals of the other hemisphere cheerfully acknowledge their indebtedness to the Eclectic physicians of the United Stated. There is less candor here, seeming like an inclination not to do justice; yet the lancet rusts, and the noxious medication which rendered the medical adviser akin to the poisoner is fast giving way to more harmless treatment, and even to the substitution of the very remedies which the Eclectics have introduced. The cloud, a little bigger than a man's hand, is now filling the sky; and we may rest assured that the mighty rain will not long be withheld.

The revival of the National Eclectic Medical Association will, doubtless, advance this new era. Almost every State Society, holding our faith and sentiments, has signified approval of this measure, and taken part in the movement. The proceedings of the meeting held in Chicago, in September last, will be duly reported to this Society, for approval and incorporation into our transactions; and we may

expect the presence of the able and accomplished president with us at our sessions. With one National Eclectic Association in Great Britain, already for four years in successful operation, and ours in this country, it will be seen that the two great English-speaking nations are beginning to harmonize upon questions as vital in their way as any that have been the theme of discussion.

The roll was called by the Recording Secretary, Dr. James M. Comins, about thirty members responding.

The credentials of persons duly accredited as delegates from auxiliary societies were received and referred to the Board of Censors, as follows:

New York City Eclectic Medical Society.—Drs. Henry A. Daniels, Josephine E. Jones, A. L. Dusseldorf and John H. Johnson.

Brooklyn Academy of Eclective Medicine.—Miss Helen A. Goodspeed, M. D.

Twelfth Senatorial District Eclectic Medical Society.—Drs. John Wilson, A. G. F. Enkel.

Thirteenth and Fifteenth Senatorial District Eclectic Medical Society.—Drs. John H. Dye, N. Bedortha.

Eighteenth Senatorial District Eclectic Medical Society.—Dr. A. P. Hale.

Central New York Eclectic Medical Society.—Drs. A. L. Purdie, E. M. Genung.

Thirtieth Senatorial District Eclectic Medical Society.—Drs. D. E. Bufton, J. C. St. John.

Thirty-second Senatorial District Eclectic Medical Society.—Drs. O. H. Simons, M. C. Belknap, A. P. Parsons, George W. Carpenter.

Several members of the Board of Censors not being in attendance, the President designated Drs. William Jones of Newburgh, Benjamin J. Stow of Brooklyn, and J. Edwin Danelson, to serve at the present meeting in their places.

Dr. J. Edwin Danelson was chosen, by resolution, to act as reporter of the proceedings.

The Secretary having read the reports of the eighth annual meeting at Rochester, on the 15th and 16th of June, 1870, Dr. Newton, of New York, objected to their adoption by the present meeting, many members present at which were absent from those meetings, and, therefore, were not competent to vote intelligently.

On motion of Dr. M. M. Fenner, the subject was deferred.

The President announced that the Annual Transactions of the Society, for the year 1870, had just been published by the State printer. The edition for the Society contained 864 pages, and the number of copies was 2,500. There had also been about 2,500 additional copies issued for members and officers of the Legislature, which they also will distribute; and the volume is in great demand among homœopathists and old school physicians. The President had himself superintended the preparation of the book.

The Treasurer, Dr. Dennis E. Smith made a partial report of the financial condition of the Society, which was referred to a committee consisting of Drs. Smith and Comins.

Dr. M. M. Fenner submitted for consideration the movement in progress for the establishment of a National Medical University at the city of Washington. He offered a resolution, authorizing the appointment of a committee, to report at the present meeting what action may be expedient in relation to the subject.

The resolution was adopted, and Drs. M. M. Fenner of Fredonia, Dennis E. Smith of Brooklyn, and L. S. Preston of Dansville were appointed.

Dr. Edwin Freeman moved the appointment of a committee for the nomination of officers of the Society for the year 1871. The motion was adopted and the following committee appointed: Drs. Freeman, R. S. Newton, M. M. Fenner, Wm. Jones and J. E. Hurlburt.

Dr. Fenner called attention to the policy recently adopted by Dr. Henry Van Aernam, Commissioner of Pensions, in accordance with the recommendations of certain old school physicians, of removing from office all physicians holding appointments under him not belonging to that method of practice. Dr. Fenner moved the appointment of a committee to recommend action upon the matter. Drs. Alexander Wilder, M. M. Fenner, and J. Edwin Danelson were appointed by vote of the Society.

A recess was taken till afternoon.

Afternoon Session, January 25th.

The Society having again assembled, Dr. Edwin Freeman presented the report of the Committee on Surgery, which was referred to the Publishing Committee.

The Board of Censors reported in favor of the admission of the following delegates as members of the Society:

John H. Johnson, M. D., New York; Miss Helen A. Goodspeed, M. D., Brooklyn; A. G. Finkle, M. D., Twelfth District; John H. Dye, M. D., Thirteenth and Fifteenth District; N. Bedortha, M. D., Thirteenth and Fifteenth District; George W. Carpenter, M. D., Thirty-second District; A. J. Purdie, M. D., Central New York; B. M. Genung, M. D., Central New York.

The other delegates not being present, no action was taken in relation to them.

The Society then proceeded to elect the persons recommended to membership.

Dr. Dennis E. Smith presented a report on Materia Medica, which was referred to the Publishing Committee.

Dr. J. Wesley Johnson, President of the National Eclectic Medical Association, was introduced, and received with an address of welcome by the President, to which he made an appropriate reply.

Dr. R. S. Newton, made a report from the Committee on the National Convention. He informed the Society that several Eclectic State Societies had cordially seconded the movement. A large meeting had been held at Chicago in September last, at which the National Eclectic Medical Association had been again organized. The next annual meeting had been appointed to be held in the city of New York, on Wednesday the 4th day of October, 1871.

Dr. Newton presented the Journal of the National Association and copies of accompanying documents which were referred to the Publishing Committee.

Mrs. Maria B. Hayden, M. D., presented a paper on the Theory and Practice of Medicine, and particulars of a case of Suppressed Lochiæ, which was read and referred.

Dr. Walter D. Jones, of Newburgh, also read a paper upon the History of Medicine, which was duly referred.

Dr. Andrew W. Russell, of Albany, presented a paper giving particulars of two cases of Poisoning by Virus communicated by dead animals, which was read and referred.

The following papers were also presented, read by title, and referred:

On Chorea, by H. C. Taylor, M. D.

On Dysmenorrhœa, by A. P. Parsons, M. D.

On Phosphorus as a Remedial Agent, by Miss Helen A. Goodspeed, M. D.

On a Case of Metallic Poisoning, by Miss Anna T. Nivison, M. D.

On Medical Education, by A. S. Davis, M. D.

The Committee on Nomination of Officers, for the year 1871, made the following report of names of candidates who were accordingly elected by ballot, as prescribed by the By-Laws:

President..... Samuel Tuthill, M. D., of Poughkeepsie.
Vice-President..... M. M. Fenner, M. D., of Fredonia.
Recording Secretary... Alexander Wilder, M. D., of New York.
Corresponding Secretary, J. Edwin Danelson, M. D., of Little Falls.
Treasurer..... James M. Comins, M. D., of New York.
Librarian..... Rollin J. Burton, M. D., of Albany.

Board of Censors.—J. C. Hurlburt, M. D., Livonia; Harman Pease, M. D., Schenectady; Robert Hamilton, M. D., Saratoga Springs; Benjamin J. Stow, M. D., Brooklyn; O. H. Simons, M. D., Jamestown; Edwin Freeman, M. D., New York.

On motion of Doctor Freeman:

Resolved, That the thanks of the Society be tendered to the retiring officers, for the fidelity and efficiency which they have displayed in the performance of their duties.

On motion of Dr. Robert S. Newton:

Resolved, That a committee of three be appointed to prepare appropriate resolutions of respect to the memory of Doctor Lyman Stanton.

Drs. Robert S. Newton, Orin Davis and Alexander Wilder were appointed as such committee.

The Auditing Committee made the following report:

Total amount of bills outstanding.....	$84 16
Collected by P. A. Morrow.....	46 00
Remaining due.....	$38 16

On motion of Dr. Edwin Freeman:

Ordered that the remaining $38.16 due by this Society, be paid by the Treasurer to the persons to whom the same is due.

On motion of Dr. Wilder:

Resolved, That three copies of the Transactions for 1871 be furnished by the librarian to members who have paid their annual dues, and that there also be supplied to auxiliary societies, not in arrears, one copy for every member of such society.

The Society took a recess till evening.

EVENING SESSION, JAN'Y 25TH.

The Society convened at eight o'clock, in the Assembly Chamber. The chair was taken by the President, Dr. Samuel Tuthill.

The annual address was delivered by Dr. Alexander Wilder, who defined the essential doctrines of Eclectic Medicine, and urged upon the consideration of the Legislature the necessity of a reform in the jurisprudence of insanity, and of more effective provision against premature burials.

Dr. J. W. Johnson seconded the views of the address in relation to the improper incarceration of persons alleged to be insane; and declared his earnest wishes for a reform in judicial proceedings in relation to the matter.

The Society adjourned till the next morning.

SECOND DAY—MORNING SESSION.

The Society assembled at the City Hall, and was called to order by the President.

The credentials of Dr. Theodore M. Van Skelline, of the Brooklyn Academy of Eclectic Medicine, were presented, and favorably reported by the Censors.

The reports of the annual and semi-annual meetings of 1870 were referred to a committee consisting of Drs. J. Edwin Danelson, J. M. Comins and R. S. Newton.

On motion of Dr. A. Wilder:

Resolved, That the committee appointed in the matter of the Bureau of Pensions be continued during the year, and that it be empowered to take such action in the case as may be deemed necessary.

On motion of Dr. R. S. Newton, the committee was also authorized to lay the matter before the President of the United States.

Dr. R. S. Newton also offered the following preamble and resolutions, which were unanimously adopted:

Whereas, The belief prevails throughout the community, and also among the members of the medical profession of this State, that persons are incarcerated in asylums for the insane, without sufficient cause or a proper investigation to ascertain whether such persons ought to be deprived of their liberty, which would be, if true, an atrocious outrage upon personal rights, without justification, and unworthy of the present age and civilization; therefore,

Resolved, That the incarceration of persons as lunatics in asylums

for the insane, without proper and sufficient inquiry into the facts, and a trial by jury, is a departure from the principles of our government, tarnishing our jurisprudence and imperilling the freedom of every individual, which ought no longer to be permitted by our Legislature.

Resolved, That this Society takes this opportunity to memorialize respectfully the Legislature at its present session, to enact the bill presented in the Assembly by the Hon. James W. Husted of Westchester, or such other measure of like purpose and character, with such stringent provisions as may be necessary to secure its efficiency for the protection of the freedom of individuals, in order that in future the people of this State may be assured in this matter that they will not be deprived of liberty or property without due process of law.

Resolved, That the Secretary of this Society be instructed to communicate copies of this preamble and resolutions, duly authenticated, to the presiding officers of the Senate and Assembly, with the respectful request that the same shall be laid before those bodies.

On motion, Drs. R. S. Newton and J. Edwin Danelson, were appointed a committee to report such action as ought, in their judgment, to be taken in relation to legal action upon insanity.

Resolved, That the Librarian be hereby directed to supply each officer of the several Eclectic State Medical Societies with a copy of the fourth volume of the Transactions of this Society.

Resolved, That the Secretary be directed to prepare a corrected list of names of the honorary members of this Society, with their respective places of residence and the dates of their election.

On motion of Dr. A. Wilder:

Resolved, That memorial sketches of Drs. Lyman Stanton, William W. Hadley and William R. Prince, be prepared and published in the Annual Transactions of this Society.

On motion of Dr. Orin Davis, the committee already appointed to prepare the sketch of Dr. Stanton, was also authorized to prepare one of Dr. W. W. Hadley.

The auxiliary society, for the fourteenth senatorial district, consisting of the counties of Greene and Ulster, was admitted by resolution, to affiliation with this Society. No delegate was in attendance.

On motion of Dr. Dennis E. Smith:

Resolved, That a Committee of Audit be appointed to examine the accounts of the Secretary and Treasurer for the last three years.

Drs. H. E. Firth, J. M. Comins and Edwin Freeman were appointed as such Committee of Audit.

Dr. R. S. Newton made a verbal report of the proceedings of the Committee on Medical Statistics.

Dr. M. M. Fenner presented a paper on Uterine Therapeutics, which was read, debated by Drs. Orin Davis, Wilder and others, and referred to the Publishing Committee.

The following additional papers were presented, read by title and referred:

On Medical Hygiene, by Dr. H. Pease.

On Pertussis, by Dr. H. Pease.

On Scrofula, by Dr. Thomas Robens.

On Eclectic Pharmacy and New Remedies, by Dr. R. S. Newton.

On Stricture of the Urethra, by Dr. Edwin Freeman.

A communication was read from Dr. O. E. Newton, of Cincinnati, expressing regret at his inability to be present, and placed on file.

The following resolutions were adopted:

Resolved, That the customary semi-annual meeting be omitted for the current year.

Resolved, That the President and Recording Secretary are hereby authorized to appoint delegates from this Society to the National Eclectic Medical Association, to attend its meeting on the 4th day of October next, and that they are also instructed to notify such delegates of their appointment, in due season to assure their attendance.

Resolved, That the Treasurer be directed to pay to Dr. Wilder, one hundred dollars, for his services in preparing the Annual Transactions for 1870.

Resolved, That the Treasurer be also directed to pay Dr. Danelson fifteen dollars for his services in reporting the proceedings of the present meeting.

The committee which was appointed at the semi-annual meeting in June last, to consider the matter of the rendering of medical degrees by the so-called University or Eclectic Medical College of Pennsylvania, was continued for another year.

A resolution of thanks was adopted, to Hon. George H. Thacher, Mayor of the city of Albany, for his courtesy in permitting the use of the rooms of the Common Council for the meetings of this Society.

The President announced the appointments for the ensuing year, as follows:

Annual Address for 1872.—Robert S. Newton, M. D.

Essayists.—Drs. Dennis E. Smith, P. A. Morrow, Byron Preston, J. M. F. Browne.

Surgery.—Drs. R. S. Newton, A. W. Russell, J. H. Johnson, Walter D. Jones, G. W. Carpenter.

Obstetrics.—Drs. M. M. Fenner, J. E. Danelson, Joel C. Hulbert, Harmon Pease.

Medical Hygiene.—Drs. Helen A. Goodspeed, George W. King, Orin Davis, Charles Archer.

Materia Medica.—Drs. N. F. Marsh, Maria B. Hayden, Josiah Arnold, A. P. Parsons.

Theory and Practice of Medicine.—Drs. James Y. Tuthill, H. E. Firth, H. C. Taylor.

Chemistry and Pharmacy.—Drs. Ed. Freeman, J. Milton Sanders, W. R. Hayden, O. H. Simons.

Progress of Eclectic Medicine.—Drs. James M. Comins, Rollin J. Burton.

Medical Statistics.—Drs. Orin Davis, William Jones, R. S. Newton, L. Robens.

Medical Instruction and Eclectic Medical Institutions.—Drs. J. H. Fitch, A. P. Hale, Calvin S Totman.

Scrofula and its Agency in Producing Mental Disorder.—Drs. A. Wilder, J. M. F. Browne.

The Eclectic Medical College of Pennsylvania.—Drs. Calvin S. Totman, M. M. Fenner, Orin Davis, William Archer, Dennis E. Smith.

The Society then adjourned.

ALEXANDER WILDER,
Recording Secretary.

ANNUAL ADDRESS

DELIVERED BEFORE THE ECLECTIC MEDICAL SOCIETY OF THE STATE OF NEW YORK, JANUARY 5, 1871.

By Alexander Wilder, M. D., President of the Society.

Assembled on this occasion at the capital of our State for a social conference with our representatives and legislators, it behooves us to remark to them that we are no obscure people asking recognition at their hands, but citizens entitled to equal rights before the law, personally, and as a profession. We do not employ the occasion, as was ill-manneredly done, a year ago, by a teacher of another medical denomination, to assert ourselves as alone invested with absolute and pontifical authority, and to denounce all who differ from us as pretenders and charlatans. Yet the New School of Medicine to which we belong, is substantially the representative of medical progress in the United States, Great Britain and the Dominion of Canada. Because advancement is the essential principle of this organization, we are now associated and have assembled by your courtesy to speak in this place.

We are physicians, students of physiological and pathological science, of the knowledges relating to man, to health and disease, and to the art of treating disease; and while we freely acknowledge that there is infinitely much that we have not learned, we deny before high heaven and in the presence of men, the right of any association or school of physicians to classify themselves and their colleges for instruction, as being those alone that are entitled to be called scientific, and to decry us who chance to entertain views and sentiments differing from theirs. Every one must be tested by his work rather than by any such assumption of superior knowledge and skill. We have no sneer or slang to hurl at any one honorably endeavoring to render important service to his fellow men.

Origin of the New School.

The New School of Medicine was born of the nineteenth century. Its doctrines, however, are older; the principles on which it is based extend far back, even into the early twilight of human history; but as a corporiety, an organization, it only claims a date within the later periods of time. We acknowledge no necessity to go back to the Middle Ages for our authority and charter any more than we would to apply to a court of heraldry to obtain the ensigns of nobility. Men in our century make history for themselves; they cut their own way to franchises and rights divine; and if there is a destiny to shape our ends, they hew a course for it with their own hands.

Political Disabilities.

It is true that we have labored under political disabilities. The spirit which has been opposed to us is most pernicious and malignant, stooping to every improper means for its unworthy purposes. For long years the statutes of this State prescribed unconstitutional penalties for Reformed practitioners of medicine; and then, when by the demand of the people, made by petitions signed by a majority of the voting population, those penalties had been removed, we were compelled, by the operation of the same malignant spirit, to wait twenty-one years for a charter in this State; and, even at the present time, are virtually excluded from every official appointment. We knew full well the nature, the animus, of the secret cabal which has been for many years so potent in this matter. But, while it has the power to persecute and malign, it can only rail, it cannot destroy. "You may outlaw the friend of truth, but truth remains; you may humble the poet, the artist and the Christian, but you cannot thereby debase poetry, art or Christianity."

Necessity for the New Practice.

It is necessary, in the present condition of the medical practice, that the New School of Medicine should exist, that the people desirous of immunity from the barbarity and the learned ignorance of our rivals, may have the opportunity to procure and enjoy the benefits of safe and efficient medical treatment. For that purpose we came into existence, and shall continue to exist. So long as the Old School of medicine will not abandon their theories of depletion, so long as they will let out men's lives with the lancet, so long as they will

poison their patients with mercury, antimony and arsenic, so long as they will refuse to amend their practice, but stubbornly and willfully denounce innovation, there must be maintained a school of medicine for the people, consonant with their wishes, and seeking to fulfill amply their just expectations.

[Dr. Wilder now read the platform and declaration of the society, and then proceeded.]

This declaration embraces our reasons for establishing a separate school of medicine. We must be free to learn and substitute more excellent methods of treating the sick. We have no design or wish to lower the standard of professional qualification. We are painfully conscious of our many short-comings; but we do not perceive that our revilers and calumniators know or do better. Besides, our observation and experience have shown to us that a relatively ignorant person, handling the remedies which we employ, is far safer to be entrusted with the care of those who are sick, than others who may be more classically and perhaps more thoroughly instructed technically, but who adhere to the approved medicaments prescribed as officinal in the dispensatories and pharmacopœias of our Old School competitors.

The Aims of the New School.

The new school of medicine has already, in its therapeutics and materia medica, become an instructor to every diverse and rival sect. Homœopathists and Old School practitioners have alike enriched themselves from its contributions to medical knowledge. Besides, it is not stationary, for it does not assume to be complete. There are many remedies yet to be discovered for human ailments; many ways to keep patients alive while nature is rallying to expel disease, yet to be revealed to man; and it is for us to watch the moment when discoveries are made, to adopt assiduously and instantly every improvement in the art of healing, and to apply it in practice; not so much with the view of advancing our own reputation, as with the sincere desire to alleviate human misery. We must never shut our eyes to any light shed on our profession, come from what source it may.

Our platform, it will be perceived, is so broad as to afford room for every generous, high-minded person who is devoted to medical science, and comprehensive enough to include every fact, every truth, every idea which is capable of use to ourselves, our profession and

our fellow men. We invite to our side every one with integrity, moral courage and proper self-respect enough to entitle him to a place here. We ask not where such a one was educated, whose diploma attests the rank, what favorite modes of practice and thought may characterize him, but whether he is honorably persisting in worthy purpose, loving truth for truth's own sake, and modestly but reverently and stubbornly prosecuting the course which honest conviction marks out for his steps. We have no traditions to enslave our intellect; no Procrustean beds or codes of ethics to destroy our manhood; no servile or selfish usages to cramp our movements and degrade us to ourselves.

The Jurisprudence of Insanity.

Assembled on this occasion at our State capital in social discussion with our representatives and legislators, we take the occasion to state to them what we require at their hands. We ask them, as a Society chartered by them, to grant to our citizens more efficient protection from invasion of personal liberty. We refer especially in this appeal to the matter of persons charged with being insane. This matter has been left too exclusively to the oversight of medical practitioners, and we have too little precaution against their unworthy motives, ignorance or want of good judgment. It has become high time to give the subject more attention. Not a single person among us is safe from peril, if any one is malicious enough to desire our harm. We need to take a "bond of fate" against physicians especially, till their power to authorize our incarceration in a lunatic asylum is duly curtailed and regulated.

Old Jealousy for Civil Rights.

It is a marvel that the matter has not received more attention, prone as we conceive ourselves to be very sensitive on all matters pertaining to personal freedom. A man crossing our threshold uninvited does it at the peril that we will shoot him down, or fell him to the ground, for the outrage. Our fathers, a century ago, made a revolution because they would not pay a tax, trifling in its amount, which neither they nor their representatives had any part in the imposing. A little more than two centuries ago King Charles I. lost his head at Whitehall, as the penalty for assailing the prerogative of the Commons, in levying and forcing the collection of ship money. We hold a festival every year, to celebrate the victory of our people

over the king of Great Britain, and we somewhat boastfully glorify ourselves and ask that other nations shall award us honor as being a free people.

Arbitrary Arrests.

Not many years since our country was involved in civil war. Men who were outspoken adversaries of the measures adopted by the federal administration were liable to arrest and imprisonment in military fortresses, where they could obtain no protection by virtue of the writ of *habeas corpus* and other appliances of civil courts. The exigencies of the nation at the time might seem to warrant such incarceration, but in our own fullest belief, expressed at the time, it did not; and the confinement of men in Fort Lafayette, without "due process of law," was the theme of indignant protest and denunciations. Certainly, it was nothing less than the exercise of imperial power, and, whether justifiable or not, it was a terrible menace against the liberty of citizens.

Lettres De Cachet.

We all have learned to execrate the old French despotism of Valois and Bourbon dynasties of the former centuries, under which were issued at pleasure the infamous *lettres de cachet*, or warrants on which persons could be and were arrested and imprisoned, often for life, perhaps not knowing all the time who was their accuser or what crime was alleged against them. Eighty years ago the people of Paris tore down the bastille, the dungeon in which such unfortunates had been immured; and the friends of freedom throughout the world rejoiced enthusiastically because of a triumph so glorious. It was well to rejoice at the downfall of such a despotism, the unfrocking of priests and the dethronement of kings who had so conspired against the people. Our chief regret is that that victory over tyrants had not been then made permanent and universal.

Yet we have among ourselves a practice which our statutes authorize, and our jurisprudence sanctions, which is as bad in principle if not in practice as anything which has yet been mentioned. Let a person once be charged with being insane and he is outlawed, almost; he has little more protection than a rabid dog. The vilest vagabond that walks our streets, the thief, the assassin, cannot be committed to prison without a sufficient warrant, issued by an authorized magis-

trate, without a subsequent hearing, at which he may publicly maintain his own defense, and where he is presupposed to be innocent till his guilt is established. Yet every one of us, however good, wise or influential, is liable at any moment, upon the certificate of a single physician, and he not necessarily an expert, to be committed to the cell of a lunatic asylum, the walls of which are as high and strong, the keepers as vigilant and morose, the code of regulations as absolute, the windows and doors as difficult to escape from, as those of any prison in the land. Indeed, the *lettres de cachet* which disgraced France under her wicked and infamous kings were the models which our legislation and jurisprudence, in regard to insanity, appear to have carefully imitated.

However, we repeat, the liberty of every person is subject to the malice of an enemy, the cupidity of a kinsman, the treachery or ignorance of a physician. No matter how bad a man that physician may be, how criminal, ignorant or besotted, whether he is young or old, if he but holds the diploma which is regarded as official every man in the community is placed at his mercy. Specious lies, perverted facts, or even bribes sometimes may induce him to sign the fatal certificate. An instrument almost as powerful as the famous "little bell" or the French *lettres de cachet* will speedily remove the unfortunate victim from society, from his every day pursuits, from the activities which had employed him, to a cell or ward of an asylum peopled only by the insane.

The Man in a Madhouse.

We remember, as vividly as though it was but yesterday, the emotion excited when, reading a nouvelette in childhood, we came to the passage relating that the hero of the story, Alfred Thorner, was duped by a trick, and forcibly removed to a madhouse, to induce him to surrender his father's lost will and testament to the man that had seized upon his patrimony. Young Thorner persisted in his refusal, upon which his persecutor uttered this threat:

"Remain here; your entire prospect these four walls; your only sport the lash; your only clothing chains; your only hope the grave."

Sane Persons Confined as Lunatics.

Our purpose is to ask for legislation which shall impose on magistrates restrictions that will be effectual to prevent the confining of sane persons in insane retreats. That this has been repeatedly done

nobody doubts; instances can be cited by almost every observer. The late Richard W. Meade, for many years an officer in the navy, brother of General Meade, opposed, with some violence of temper, the marriage of his daughter to a man obnoxious to him. He was arrested, and incarcerated at the Bloomingdale Asylum on a physician's certificate; but, after a delay and imprisonment of several weeks, was discharged by Judge Ingraham. Meanwhile the marriage had taken place.

A young woman in New Jersey, a relative of ex-Governor Price, contracted a marriage a few years since which her kindred did not approve. She was immediately arrested and incarcerated in an institution for the insane, and for several weeks her husband was unable to procure an interview with her, or a legal process by which to obtain her liberty. The newspapers commented very severely upon the matter, and an elderly kinswoman of the young wife visited the several offices to ask the editors to withhold further criticisms till an explanation could be prepared for the public. But we never saw nor heard of that explanation, although connected with a leading journal.

The case of Henry Frothingham is still fresh in memory. He was imprisoned at Bloomingdale, although no person connected with the asylum believed him insane, and his release was only procured after much trouble. The particulars are fresh in every one's memory.

MORGAN HINCHMAN.

Misery is said to love company. We have known individuals involved in defeat or misfortune who hastened to make accusations against others more lucky, not so much from malice as from that curious instinct of human selfishness inspiring the desire that others should suffer likewise. Perhaps we are yielding somewhat to a like impulse when we assert that the jurisprudence of other States of this Union is blotted as badly as our own. Yet, whatever our motive, the allegation is true.

A few years ago, Morgan Hinchman, a member of the Society of Friends, was kidnapped in Philadelphia, and conveyed to the lunatic asylum at Frankford. For six months he was kept a close prisoner, denied the usual privileges of the establishment, encompassed about by maniacs and wrecks of human beings, and refused all intercourse with his friends or any who had known him. An old servant endeavored to see him, but was refused. He wrote letters to a friend, but in vain.

The only reason alleged for this outrageous treatment was, that "such were the instructions of his friends." It appeared that his wife had become estranged from him, and had been a party to the proceeding.

Morgan Hinchman was imprisoned upon the certificate of a physician. During his incarceration the grass grew over the grave of a dead child; his property was sold at public auction and the proceeds employed to pay the expenses of his confinement; his books, furniture and clothing were divided among the very persons who had conspired for his kidnapping and his burial in the living tomb.

Such spoliation operates as a rare expedient to assure impunity for crime. A person having property is obliged, like a defendant in a lawsuit, to pay all the expenses incurred to get him into the place of confinement; then for his own support while he is in durance, and also for all the proceedings necessary for his liberation. When he comes out he is thus made destitute of the means for prosecuting those who have so cruelly injured him. Thus is the law as it stands, more relentless than the grave, more pitiless than hell.

An uncle of Morgan Hinchman learned that the young man was imprisoned in the lunatic asylum and immediately waited on the conspirators, who threatened him that if he attempted to reclaim his nephew's property they would proceed against him, likewise, as an insane man, or would so blacken his character that he would not be able to walk the streets.

An appeal was made to the superintendent of the asylum, who is reported, under oath, to have said: "It is a mere family matter. If Hinchman would arrange his property there would be an end of it."

Hinchman Escapes and Prosecutes.

Finally the unfortunate man did escape, and he instituted proceedings for damages. The testimony made fearful disclosures, both against the guilty persons and against the officers of the lunatic asylum. Signatures were denied, orders repudiated, minutes kept back, records vitiated or altered, letters burned which would have proved the sanity of Hinchman and the entire scheme of the conspiracy, burned while the trial was going on, lest they might come up in evidence.

One manager testified that the superintendent could not look beyond the papers of admission supplied by the friends of the patient; that he had no power to discharge an inmate, no matter how long his cure

had been established, without the consent of the friends who had placed him there.

Another manager declared, under oath, that, "on the mere certificate of any doctor whatever, he would consign any one of the hundreds then in the court-room to incarceration in the Frankford Asylum."

The medical practitioner who had certified that Hinchman was insane had never been his physician, and had not seen him for four months previous to signing it.

Literary Taste an Evidence of Insanity.

Another man, living in Philadelphia, was of an esthetic and literary turn of mind. He had never married, and was past the prime of life. He was fond of books, pictures and elegant furniture, and filled his house with them. His kindred were rich and uneducated Germans. They procured a physician, who certified that the man was insane. As he went out of his house one evening, a policeman arrested him and conveyed him to the Spring Garden station-house, where he spent the night in a cell. The next morning he was placed in a close carriage and carried to the Pennsylvania Hospital for the Insane. A lady was visiting the institution and was at once recognized by him. She sent a lawyer to him, who procured a writ of *habeas corpus*, in pursuance of which he was brought before the Court of Common Pleas. In this case, the physician who had granted the certificate acknowledged that he had not seen the man for seven weeks previous to the time of signing. The physician of the hospital testified in the following words: "From the moment that he was brought there his conduct betokened insanity. He was violent to the officers, talked loudly, and protested wildly against being deprived of his liberty, at first; then he became moody and silent, watched the door, or went off by himself to distant parts of the building. He did not sleep, but paced his room at night."

If that is conclusive evidence of insanity, there is not a sane man in America. There is not the person within hearing who would not, if kidnapped in such a manner, have acted very much like this unfortunate victim.

The Pennsylvania Hospital for the Insane, however, was too powerful a body to be defied. The man was remanded to give an opportunity to take out an inquisition of lunacy; but this was not done; and after two weeks he was liberated, to find that his property had been sold at auction and the proceeds divided by his relatives.

A Woman Imprisoned.

A merchant of Philadelphia was tired of his wife, and preferring to avoid the scandal of a suit for divorce, obtained the physician's certificate, after which she was conveyed to the hospital. Dr. Kirkbride, the superintendent, was not convinced; and, after taking much trouble, assured himself of her sanity and procured an order of court for her discharge.

Dangers of the Present Method of Proceeding.

Are we any too severe when we declare that a jurisprudence which permits a man holding a medical diploma to swear away the liberty of another in such a manner, and consigns a person to a lunatic asylum, on such slight evidence, is a more fearful adversary to personal liberty than "arbitrary arrests" and *lettres de cachet?* Certainly, such power ought not to be vested in the members of any profession, or in any man's trust, without very efficient safeguards.

The Remedy.

A law to remedy their hardships should be very explicit in requiring competent testimony to show a person insane; assuring him, at the same time, of a proper magistrate and suitable persons in every commission of lunacy; superadded, if judged proper, with a trial by jury. No officer of a lower grade than a county judge should be authorized to take proceedings in the case.

It is probable that there can be no more suitable way desired for commencing than the ordinary course of complaint and arrest. But the investigation should never be *ex parte;* the person accused should have the right of defense and rebuttal as perfectly as if he was the defendant in any other prosecution. He should be represented in a commission of lunacy by at least one person chosen by him or in his behalf. Every care should be taken to prevent the adjudication from being wholly in the power of those who are instituting and conducting the proceedings against him. One person in the commission should be a physician, expert in such matters; one should be an attorney, equally skillful in the law; and a third should be an intelligent layman. Perhaps there should be others, but upon this subject we are not positive.

Medical Qualifications.

There ought to be a distinction made as to physicians sitting on inquests or giving testimony in cases of alleged insanity. At the

present time all graduates of medical colleges hold the same degree of Doctor of Medicine, and are, in every respect, equal in rank to the oldest and ablest members of the profession. The law ought to make a distinction. There should be three grades of medical practitioners—certainly two. The new graduate ought to be kept for a period of time under the eye of an experienced physician, before he is considered a proficient in the art; during which period he should be incompetent to give medical testimony or have any professional function in connection with persons supposed to be insane.

There ought also to be a special degree and honor for the medical practitioner of ripe learning and experience, who has magnified his vocation and made himself familiar with its important details. Such only should be permitted to sit as a professional man on commissions of lunacy; and no medical certificate should be authorized except from a qualified physician having actual knowledge of the case.

A double benefit would thus be secured. There would be protection afforded against incarceration in lunatic asylums, at the instance of incompetent or unprincipled physicians, who know not or care not how much wrong they do, provided they obtain their fee; and the medical profession itself would be placed on a better foundation.

Protest against Unjust Discrimination.

We have protested, and we will protest against the assumption of persons belonging to one school of medicine that its members alone are scientific, for we know better, and so do they who make the preposterous claim. But we are willing that every practicing physician shall be required to demonstrate his calling by thorough scientific attainment and judicious application of remedies. We have no objection to disabilities which are not created for partisan purposes or other unworthy design, but which will be effectual in increasing the qualifications of the practitioner. This cannot be done, however, by a system of pains and penalties, but can be accomplished by the incentives of honor and improved rank.

Further Protection for Alleged Lunatics.

The rulings of the court in proceedings for lunacy should always be, as far as possible, in favor of the alleged lunatic as the person most needing friends.

The Legislature should also provide an efficient system for the visitation of lunatics, together with a review of former proceedings,

and a new trial, if the facts so warrant; and in all cases where the proceedings have been taken on slight evidence or unworthy motives, somebody else than the person whose liberty has been thus assailed should bear the expense.

Especially, the respectability and eminent social or professional positions of the persons having the custody of those alleged to be insane should never be allowed to preponderate in the scale against individuals restrained of their liberty. It is enough for them if they have acted discreetly and in good faith. We cannot have too many safeguards around the rights of innocent persons.

A Legal Standard of Insanity Wanting.

We regret that there is no legal standard to determine aright these questions. A man is guilty of murder under aggravating circumstances; he is defended on the ground of insanity, acquitted, and then permitted to roam at large, without supervision or restraint. Another devotes his energies to business, with no suspicion cleaving to him of unsound intellect; but his will grants what is regarded as too much money to some charity or religious purpose, or distinguishes in favor of some particular friend or relative, and immediately its validity is questioned, and provisions often set aside. Thus a man may not do what he will with his own. If his wishes or tastes differ from the tastes or wishes of those around him he is declared to be eccentric, and is liable, accordingly, to be imprisoned as insane, while living, or to have his will annulled after death. No two magistrates have a like criterion to distinguish between the sane and the insane. Hence, every man's freedom to go at large is more or less insecure, and the administration of criminal law is alarmingly uncertain.

The present jurisprudence in cases of insanity, with all its amelioration, is a blot on our civilization. It directly contravenes the purpose of civil government; it creates a universal insecurity of person and property; it invests men with extraordinary powers, without first assuring their responsibility; it deprives persons of liberty and property without due process of law. Obnoxious persons were not in greater danger of the gallows during the few weeks of excitement at Salem in the year 1692 than they are of the lunatic asylum in 1871.

Legislation Wanted.

England has reformed her legislation, giving additional safeguards to those accused of insanity. We ought to have led; at any rate,

we should hasten to imitate the good example. The proceedings in such cases should be so changed as to assure to the alleged lunatic every opportunity of rebuttal, as has been already indicated. The proceedings should also be reviewed or reopened whenever the facts so warrant. They can be ascertained by employing visitors to inspect every asylum within stated periods, who shall be required to investigate every equivocal or suspicious case, and see to it that an inquisition of lunacy shall be had in all instances where there is apparent propriety for such a proceeding.

Let there be an urgent appeal made to our Legislature in this matter; for delay, after the alarm is sounded, is a crime. We want no bastilles for our people here on our soil. We ask the right which our fathers fought to establish, of freedom for our persons and control of our property, only to be jeoparded by actual wrong doing.

Premature Burials.

There is another subject, terrible in its horrors, which also ought to have consideration at the hands of our lawmakers, the premature burying of persons supposed to be dead.* It is a topic most fearful to contemplate. We remember vividly the horror produced, while yet in our boyhood, when an elderly sister read from the Utica *Observer*, a story entitled "Buried Alive." The person had fallen into a cataleptic condition, becoming cold and rigid while yet conscious, and was duly coffined and buried. He was exhumed by "resurrectionists," carried to a medical college, and placed on the table of the demonstrator of anatomy. A few shocks of the galvanic battery partially aroused him, and on the wounding of his breast by the knife he gave signs of life, and by proper treatment was fully resuscitated.

Ten or twelve years afterward a relative, where we were visiting, told us of having been present when the body of her son-in-law was made ready for the coffin, and perceiving, as she imagined, a warm spot on the left breast; a daughter, who was sitting by, as this was told, cried out with horror:

"Do not talk any more of it; the idea is too dreadful to think of."

But we did think over and over again of the horror of interring a

*A bill in relation to this subject was introduced into the Senate by Hon. A. X. Parker, and referred to the committee on the judiciary; but no report was made. Hon. Mr. Husted, of Westchester, also introduced a bill in relation to lunacy, based on the principles of this address. It was reported, but no further action taken. Messrs. Frear and Creamer also introduced bills relating to persons alleged to be insane, in the city of New York, but they failed.—*A. W.*

living person. It was hardly probable, in the case in question, that such a thing did occur, for the body remained unburied long enough to allow of a return to consciousness. But in this country the peril of interment before death has actually taken place is often very great. For years past it has been very common for persons in supposed health to fall down suddenly, with every appearance of having died. We do not regard sudden death with horror, as it is so often painless, and exempts the person from the anxiety and other unpleasant experiences which so often accompany a lingering dissolution. But there is a fearful liability of being prostrated by catalepsy, the counterfeit of death, under such circumstances that the persons having the body in charge will not hesitate about a prompt interment.

We could wish that the old oriental practice of cremation was in fashion among us. There would be at least the comfortable reflection of no suffocation in a coffin; besides, the application of fire would generally arouse the cataleptic person to manifestation of life.

Some two years ago a story was copied into the Rochester *Democrat*, purporting to be the experience of a man in a low state of health, who was compelled to seek shelter in a deserted house in Illinois, where he fell asleep. He was found there in a cataleptic trance, and supposed to have died. In this condition he was removed and prepared for burial, conscious all the time of what was going on, but unable to utter a sound or make a sign of life. His condition was fortunately discovered before it was too late. The story may be a fiction, but it did not read like one.

We have several times repeated the story, although it is too serious for a jest, except when regarded entirely on the ludicrous side, of a woman who, while borne to the place of interment, was aroused to consciousness by the jostling of her coffin against the wall of a house, as the bearers clumsily turned the corner. She was speedily released from her cerements and conveyed home, where she lived several years longer. She fell into a decline and died; the funeral again took place and the procession set out for the grave. As it drew near to the house at the corner, the husband wiped his eyes hastily, and cried out to the bearers: "Be careful as you turn the corner."

It is, however, no topic for a jest when we consider the matter from the proper point. Persons are buried alive, and have a terrible period of agony in the coffin before death comes to their relief.

We execrate the old Roman law which authorized the magistrates to bury alive their incontinent vestal virgins. The Thracians, after

the practice of India, buried widows. Amestris or Esther, queen of Xerxes of Persia, caused fourteen living children to be interred; and till lately Hindoo widows were buried or burned alive at suttees. But we, in our recklessness, do as badly as they.

A writer in "The Nineteenth Century" informs us that at the public *mortuaire* of Paris about one in every three hundred persons supposed to be dead actually comes again to life. At that rate one hundred persons must be buried alive annually belonging to the city of New York; and here, too, not a tithe of the precautions are taken that are required in France and England.

A well-authenticated case is on record of a strong man dropping away suddenly, whose grave or tomb was opened four days after, and the body found twisted round in the coffin, and a hip dislocated, the hair turned white and torn out, and the features distorted in a horrible manner. Fearful was the struggle of that man in his ghastly conflict for life with every odds against him.

A young woman, also, beautiful in person and intellect, was buried in the usual hurry, some ten years ago. The body was afterward taken up for removal to a distant cemetery. She, too, had been engaged and worsted in her coffin in a terrible struggle for life. Her face was gashed, her hands and arms frightfully torn, her feet drawn up in a wild endeavor to extricate herself from the horrible prison, her face furrowed and lacerated by the finger-nails, so desperate had been that struggle.

A young man in another city, was thus buried, and his grave opened six days afterward. The body had turned upon the face, the arm was bitten to the bone, and there were other evidences of the death-wrestling.

We remember that the story was told several years ago, that Lorenzo B. Shepard, a prominent lawyer of the city of New York, who died in the apparently full vigor of life, actually recovered after interment, and that the cloths about his face were found to be saturated with his blood. We know nothing of the accuracy of the story.

Bodies have been removed from old to new burying-grounds, several of them having turned over in the coffins. Perhaps this phenomenon is produced by the mechanical force of the gases which are generated by decomposition, but who knows?

We have reflected much upon this subject, and not without much anxiety. There is actually little protection for any of us from this terrible peril. We exhaust our energies by overwork, excitement,

too much fatigue of the brain, the use of tobacco, sedatives and anæsthetics, and by habits and practices which hasten the three sisters in the spinning of the fatal thread. Appoplexy, palsy, epilepsy are likely to prostrate us at any moment; and catalepsy, perhaps, is not far from any one of us. This last affection is characterized by a loss, more or less complete, of consciousness, and with a peculiar rigidity of the muscles, causing the body and each part of it to retain the position in which it may have been at the moment of attack, or in which it may afterward be placed. It may attack both sides of the body, one side only, or a single limb or organ. Sometimes it is preceded by signs of nervous disorder, and at other times it occurs without any previous warning symptom. Any stray emotion, any unusual or protracted intellectual exertion, great physical exhaustion, unsatiated sexual desire or excessive indulgence, the retrocession of a cutaneous eruption; in short, anything that debilitates the system will produce this singular attack.

Of course, as with most disorders, it is occasioned in males by disorders of the digestive system, and in females with disease of the womb.

Caution should, therefore, be observed; and surfeiting, undue exposure to extreme heat or cold, overtasking the brain, excessive bathing, mental excitement, sexual aberrations, the use of tobacco or anæsthetics, unwholesome postures in bed, etc., should be carefully avoided. When a peculiar feeling of stupor in perceived, the limbs "fall asleep" without apparent cause, or there is an uneasiness and rigidity of any of the muscles, with vertigo, lassitude, debility and caprice of the mind, a susceptible person should be on the alert, for there may be no time to waste. These are incipient symptoms of an attack.

The signs of total extinction of life are not so unequivocal as many suppose. Cessation of respiration and circulation cannot afford positive evidence, for the external senses are not sufficiently acute to enable us to detect either respiration or circulation in the smallest degree compatible with mere existence. Loss of heat is not conclusive; for life may continue and recovery take place when no perceptible vital warmth exists.

It is customary in some places to cut or amputate a finger, relying on the flow or non-flowing of the blood to reveal the actual fact. Perhaps vesication would be equally sure. Heat or an irritating substance could be applied to the skin; the occurring of a blister is

evidence of vitality. Foubert proposed as a test to cut into one of the intercostal spaces and feel the heart with the finger.

Holding the fingers before a light is said to be sure; a redness being apparent in the living subject, but none in case of death.

Galvanism has been supposed to furnish a certain test. Irritability is extinguished first in the left ventricle, then in the intestines and stomach, next in the bladder, afterward in the right ventricle, then in the œsophagus, and after that in the iris. The muscles of the trunk finally give way, the extremities and the auricles. The collapsed edge of a wound in a dead body in distinction from a gashing wound in a living one is the result of a peculiar irritability, the extinction of which is one of the surest indications of death. Flaccidity is a certain sign of death, putrefaction is unequivocal.

Belladonna or the Calabar bean applied to the eye, it is said, will sensibly affect the iris if the person is living.

The number of persons who have revived at the last moment, when about to be consigned to the coffin, is fearfully great. The number known to have been actually buried alive is already sufficient to justify extraordinary precautions in every case. Babier collected the details of fifty-two cases of persons buried alive; of fifty-three who recovered without assistance after they were laid in their coffins, and of seventy-two falsely reported as dead.

Legislation ought to be interposed in this matter. The law should require the examination of the body by a medical man or expert before permitting its interment. When a physician has been employed he should be obliged to certify to actual death, unless the unequivocal evidences of dissolution had already appeared. Undertakers and others having charge of funerals should be compelled to ascertain that death has occured before coffining the remains.

The idea of suffocation in a coffin is more terrible than that of torture on the rack or burning at the stake. Carelessness cannot be innocent; even ignorance in such a matter is akin to crime.

A mockery is our sorrowing, our tears are little better than hypocrisy, when we neglect precautions against the terrible fate to which every one of us is thus liable.

THE ECLECTIC MEDICAL COLLEGE.

SEVENTH COMMENCEMENT.

The seventh commencement of the Eclectic Medical College of the City of New York, for the session of 1870–71, took place at Association Hall, East Twenty-third street, on Saturday evening, February 11th, 1871. The hall was filled to its utmost dimensions. The platform was occupied by the officers and faculty of the college; Dr. Alexander Wilder, the president of the corporation, occupying the chair. The distinguished organist, Charles B. Schuyler, was present and diversified the proceedings of the evening with music.

Prayer was offered by Rev. E. C. Sweetser, pastor of the Bleecker street Universalist church.

The report of the session of the college was read by Prof. James M. Comins, M. D., secretary of the faculty; to which he added the following remarks:

"The Eclectic Medical College of New York came into existence in 1865, since which time we have held eight sessions, and graduated 120 students, eighteen of whom are ladies. Most all of these graduates are engaged in lucrative practice in various parts of the country. Scarcely a generation has passed since the first Eclectic school of medicine was established, yet in our own land we count twelve thousand strong.

"We have State organizations in almost all the States of the Union, and auxiliary societies to each State association, working in perfect concord, for the furtherance of our noble cause. Then, too, we have a national association that gathers them all in one bond of fellowship and fraternal love.

"In our session, just closed, the class numbered seventy students, gathered together from the various States, as follows:

"New York 36, Massachusetts 10, Connecticut 5, New Jersey 2, Indiana 2, Pennsylvania 1, North Carolina 2, Illinois 1, New Hampshire 1, Maine 1, Missouri 1, Michigan 1, Wisconsin 1, New Brunswick 1, England 5.

"In the graduating class before me there are fifteen, and we feel proud to send such accomplished scholars forth from our young and flourishing institution. They have studied long and well, delving deep into the mysteries of the mysterious art; they have passed the ordeal of the *green room* with the highest honors; and I am but echoing the voice of all my colleagues when I say we have never seen a better classs from any institution. The degrees *ad eundem* conferred are five in number. The honorary degrees, four in number, have been placed to the names of eminent members of the profession."

Dr. Robert S. Newton, president of the faculty, next announced the names of the graduating class, as follows:

Names of the Graduates.—Matthew S. Aisbitt, Pennsylvania; Midas E. Bishop, New York; George W. Chase, Massachusetts; J. B. M. Dickens, Massachusetts; Elizabeth Firth, New York; Edward S. Gordon, North Carolina; Joseph Griffith, New Jersey; Peter Hynan, New York; Nathaniel Jewett, Massachusetts; Elihu Morgan, Massachusetts; William Prankard, New York; Marie J. Parks, Indiana; Edwin Ripley, Connecticut; Joseph T. Ricker, Ohio; Joseph Simms, New York.

Ad Eundem.—William Aspinwall, England; Robert L. Bayley, England; George Lamb, England; William Lewis, England; William T. Y. Smith, England.

Honorary.—Geo. W. Carpenter, New York; Samuel Clark, Illinois; Albert Fox, New York; James J. Sharp, New York.

Dr. Alexander Wilder, in presenting the diplomas, addressed the graduating class, as follows:

"LADIES AND GENTLEMEN.—You have assembled daily, month after month, to prosecute the study of an art which has been regarded for uncounted centuries most essential to human welfare, and to master the principles of a science embracing within its scope the facts pertaining to the physical, and it may be the spiritual nature of mankind. The season of your discipleship has been accomplished, and you, doubtless, with somewhat of exultation, now advance to receive the meed of your labor, which we trust you have faithfully and honorably earned. This hour is yours; may it constitute an episode in your history which will deserve and hold a grateful place in memory. You must now enter the great outside world and find places for yourselves in its social life and among its numerous industries. Your success will depend upon your own force of character, your fidelity

and tact, as well as upon the thoroughness of your scientific attainments, and whatever other preparation you have made.

"My office is but to express the voice of your instructors and examiners, as the same has been ratified by the curators of this institution, and to inaugurate you into your chosen vocation. I, therefore, by the authority committed to me by the laws of this State and by the suffrage of my official associates, and conformably to the charter and regulations of this institution, do now confer upon you each and severally the degree of Doctor of Medicine, with the honors, dignities and privileges to it pertaining.

"Welcome to the profession of which you now assume the responsibilities. Welcome to its labors and its rewards; to the opportunities of usefulness which it confers, and to whatever of delight and honorable triumph you may be enabled to achieve.

"Let your fidelity, your patience, your stability of purpose, be equal to the importance of the relation which you have now assumed to your fellow-beings. They look to the physician for counsel in the most important, and often in the most delicate matters of their life; for they almost instinctively believe that the medical art is exercised only by those having superior knowledge, the fullest sympathy with suffering, and a power of perception or wisdom almost supernal. In the hour of pain, during the tedious watches which the patient unwillingly keeps, the medical adviser is the most welcome of visitors, for with him comes whatever of hope can be aroused for relief and restoration. If the mind is burdened and the heart wrung with grief, even then often the physician is regarded as the proper minister of consolation and peace. This has been the case with all peoples, all ages and countries. Let this confidence be accepted with the rarest fidelity. I charge upon you to observe rigidly the obligations of the ancient oath which all who were authorized to practice the healing art were formerly required to promise, to perform faithfully and conscientiously the duties of your vocation, to maintain its honor and dignity, to preserve inviolate the secrets of your patients, and ever to uphold the cause of truth and science.

"The school of medicine into which we have sought to initiate you, with its peculiar modes of treatment, was born of the inexorable purpose of the people of our country to have a safe as well as scientific system of practice. We are the representatives of the revolution which is overturning the barbarous dominion characterized by sick-room tortures and poisonous medication, which

now requires practical results rather than a learned technology, and makes the recovery of the sick rather than the display of the tinsel of erudition the test of merit. We are not to be overborne by any reproach or contumely because of our origin. Antæus, when engaged in deadly conflict with Hercules, always returned to the attack with vigor, when, falling upon the bosom of his mother, the earth, he thus could resuscitate his strength. The Eclectics, however overborne, will always hold their own, so long as they can, amid all the odds, remain the humble physicians of the people.

"The little ball of snow upon the mountain summit is hardly of itself a thing to be noted or remarked; a rock, a tree, or even a hillock may arrest its progress; but as it moves along it aggregates to itself new accretions and increased momentum, and so continues its progress on, on, onward, till finally we find it has become the mighty avalanche whose career can no longer be obstructed, for its force is irresistible. Such is the similitude of our own history. We are yet in the earlier periods, but our therapeutics and our *materia medica* have been the gospel of the sick, and our professional rivals have gladly appropriated them for their own advantage. The lancet, more destructive than the weapon of the soldier, has rusted in its sheath; for the people now, enlightened by the preaching of the medical reformer, refuse to be subjected to its use. May we yet be able to expel from our practice the mineral, which no benign spirit of life has ever permeated, and substitute the organic product of nature, in the molecules of which, the heat, light, actinism, and every beneficent potency which the sun disseminates, are all stored away, and which life itself has organized, baptized, assimilated and made sacred."

The charge to the graduates was made by Professor Paul W. Allen. It was able and interesting, and embodied fitting words of counsel, with many valuable suggestions.

Hon. Horace Greeley then delivered an address to the graduates. He expressed his belief in the theory of medical progress, and remarked that, within the last century, the cause of science had progressed more than within the twenty centuries previous. In this connection he disclaimed conservatism in medical theories, observing that all the great scientific discoveries, such as the circulation of the blood, etc., were at first strongly opposed by the dignitaries of the profession. He counselled the graduates to study, and to make themselves perfect in the treatment of a particular disease, rather than to obtain

an indifferent knowledge of various diseases; and with this idea carried into effect, with honesty and perseverance, he had hopes of greater promise in medical science.

The valedictory oration was pronounced by Joseph T. Ricker, M. D. It was eloquently delivered, and well received on the part of the class and all present.

A highly interesting and humorous speech was then made by the Rev. E. C. Sweetzer. It contained much invaluable advice to the graduates in relation to their future career, and abounded in happy illustrations and well-directed hits at the other schools of practice.

The annual meeting of the Eclectic Medical College of the city of New York, was held at the rooms of the institution, May 25th, 1871. The following officers were elected:

President, Alexander Wilder, M. D., of New York; *Vice-President*, Dennis E. Smith, M. D., of Brooklyn; *Treasurer*, Benjamin J. Stow, M. D., of Brooklyn; *Recording Secretary*, John F. Cleveland, Esq., of New York; *Corresponding Secretary*, Henri L. Stewart, Esq., of New York; *Executive Committee*, Robert S. Newton, Charles P. Sykes, Henri L. Stewart, P. A. Morrow.

Board of Censors.—Dennis E. Smith, M. D., of Brooklyn; Samuel Tuthill, M. D., of Poughkeepsie; Alexander Wilder, M. D., of New York; P. A. Morrow, M. D., of New York; Horatio E. Firth, M. D., of Brooklyn.

The following Faculty was also chosen for the ensuing year:

Professor of Surgery.—Robert S. Newton.

Professor of the Theory and Practice of Medicine.—Paul W. Allen, M. D.

Professor of Materia Medica and Pharmacy.—E. L. McClellan, M. D.

Professor of Anatomy.—R. A. Gunn, M. D.

Professr of Physiology and Pathology.—J. M. F. Browne, M. D., LL.D.

Professor of Obstetrics and Diseases of Women and Children.—James M. Comins, M. D.

Professor of Chemistry and Toxicology.—J. Milton Sanders, M. D., LL.D.

Professor of Medical Jurisprudence.—Frank Taber, M. D.

Demonstrator of Anatomy.—Joseph T. Ricker, M. D.

The following persons constitute the Board of Trustees of the Eclectic Medical College of the city of New York:

Hon. William M. Tweed, Hon. Richard B. Connolly, Hon. John J. Bradley, Hon. Alexander Frear, Hon. John F. Cleveland, Henri L. Stewart, Esq., Charles P. Sykes, Esq., C. B. Wheeler, Esq., Sam'l Sinclair, Esq., Alexander Wilder, M. D., Dennis E. Smith, M. D., Benjamin J. Stow, M. D., Horatio E. Firth, M. D., Robert S. Newton, M. D., P. Albert Morrow, M. D., Samuel Tuthill, M. D., William Jones, M. D., Frank Taber, LL.D., William Moller, Esq.

Act of Incorporation.

The Eclectic Medical College, of the city of New York, was incorporated by the Legislature on the 22d day of April, 1865. The charter was further amended in 1869.

The following is the charter of the College, together with the amendments made by the Legislature of 1869:

Laws of 1865, Chapter 452.

An Act to incorporate the Eclectic Medical College of the city of New York.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. William Moller, William F. Havemeyer, Robert S. Newton, Dennis E. Smith, Oliver Charlick, Albert Havemeyer, Calvin S. Totman, Andrew W. Russell, Alexander Wilder, William W. Hadley, Samuel Tuthill, H. L. Stewart, William P. Strickland, Frank Tabor, Martin Thatcher, and their associates and successors in office, are hereby created a body corporate and politic, by the name of The Eclectic Medical College, to be located in the city of New York, for the purpose of promoting medical science and instruction; and in that capacity shall be capable of suing and being sued, pleading and being impleaded, defending and being defended, as any other body corporate, in any of the courts of this State. [*Amended by section 2 of chapter 449 of the Laws of* 1869, *as will be seen below.*]

§ 2. The said corporation shall constitute the Board of Trustees, with power to fill any vacancy that may occur in the Board; they shall have a common seal, which they may alter or renew at pleasure; they may purchase, hold and possess real and personal estate to the amount of three hundred thousand dollars; they may hold and dispose of property in their corporate capacity, and the funds or property

thereof shall not be used for any other purpose than that declared in the first section of this act, and for the establishment and maintenance of a dispensary and hospital in connection with the aforesaid College.

§ 3. The Board of Trustees shall annually appoint a Faculty, to consist of not less than six persons, qualified to instruct students in Anatomy, Physiology, the Institutes and Practice of Medicine and Surgery, Obstetrics, Materia Medica, Therapeutics, Hygiene, Chemistry, Pharmacy, Medical Jurisprudence, and kindred sciences; and also a Board of Censors, not less than three in number, none of whom shall be a professor or instructor in said College, to examine and recommend candidates for the degree of Doctor of Medicine.

No person over sixteen years of age, of good moral character, who has gone through the proper course of preliminary study, and conforming to the usual rules of admission and attendance, shall be excluded from attendance at the terms of instruction at said College. [*As amended by section* 1 *of chapter* 449 *of the Laws of* 1869.]

§ 4. The Board of Trustees are empowered, upon the recommendation of the Faculty and Board of Censors, to grant and confer the degree of Doctor of Medicine upon students of said College; but no such student shall receive such degree unless he shall be twenty-one years of age, and shall have pursued the study of medicine for at least three years, under the supervision of a reputable physician, and have attended at least two full terms of instruction in an incorporated medical institution, the last of which terms shall have been held by this College. The said Board of Trustees may also confer said degree, either honorary or *ad eundum*, in pursuance of the recommendation of the Censors, upon eminent practitioners of medicine and persons holding diplomas from other reputable incorporated medical institutions. [*As amended by section* 1 *of chapter* 448 *of the Laws of* 1869.]

§ 5. The said Trustees, in testimony of the conferment of said degree, shall present to the candidate the diploma of said College duly certifying the same, and attested by the seal of the corporation and signatures of their President and Secretary, a majority of the Board of Censors and of the instructors in said institution. The said diploma shall bear the date of its conferment by the order of the Board of Trustees, and shall entitle the person receiving it to all the rights, privileges, immunities and liabilities of physicians as declared by the laws of this State. [*As amended by section* 1 *of chapter* 449 *of the Laws of* 1869.]

§ 6. [*Repealed by section* 3 *of chapter* 449 *of the Laws of* 1869.]

§ 7. The College shall be subject to the visitation of the Regents of the University, and the Trustees shall report to them on the first day of October in each year.

§ 8. The corporation hereby created shall possess the powers and be subject to the provisions of the eighteenth chapter of (the first part) of the Revised Statutes, so far as the same are applicable.

§ 9. This act shall take effect immediately.

LAWS OF 1869, CHAPTER 449.

AN ACT in relation to the Eclectic Medical College of the city of New York.

Passed April 30th, 1869.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

SECTION 1. Sections three, four and five of chapter five hundred and forty two of the Laws of eighteen hundred and sixty-five are hereby amended so as to read as follows: [*Sections already given.*]

§ 2. The Board of Trustees shall consist of not less than ten, nor more than twenty members, as the by-laws shall provide. John F. Cleveland, Asahel N. Cole, Richard B. Connolly, Horatio E. Firth, William W. Hadley, William Moller, P. Albert Morrow, Robert S. Newton, Dennis E. Smith, Samuel Sinclair, Benjamin J. Stow, Frank Tabor, Samuel Tuthill, C. B. Wheeler, Alexander Wilder, their associates and successors, are hereby declared and constituted the corporation of said College, with the full powers, rank and functions of the same, and may also fill vacancies in their own number. Six of said trustees, including the President or Vice-President, shall constitute a quorum for the transaction of all business, except so far as the same may relate to the leasing, purchasing, holding and disposing of real estate, all of which acts shall require the assent of a majority. In case of the failure of a trustee to attend meetings of the Board for the space of a year, it shall be lawful to declare his seat vacant.

§ 3. All provisions of chapter five hundred and forty-two of the Laws of eighteen hundred and sixty-five which are inconsistent with this act, are hereby repealed.

The course of lectures for the winter of 1871–2, will begin on the 13th day of October. Women as well as men are admitted as students.

MEETINGS OF AUXILIARY SOCIETIES.

ECLECTIC MEDICAL SOCIETY OF THE CITY OF NEW YORK.

No report has been received.

BROOKLYN ACADEMY OF ECLECTIC MEDICINE.

No report has been received.

ECLECTIC MEDICAL SOCIETY OF THE TWELFTH SENATORIAL DISTRICT.

The Eclectic Medical Society of the Twelfth Senatorial District met at the American House in the city of Troy, on the third Tuesday of August, 1870, at eleven o'clock in the forenoon. The President, Dr. J. A. Martin, occupied the chair. The minutes of the last meeting were read and approved.

The name of Dr. John Willson, of Greenbush, was proposed and he was elected, unanimously, to membership.

The following officers were elected for the ensuing year:

President, Dr. J. A. Martin, Troy; *Vice-President*, Dr. A. R. Edson, Greenwich; *Recording Secretary*, Dr. H. E. Finkle, Sand Lake; *Corresponding Secretary*, Dr. John Willson, Greenbush; *Treasurer*, Dr. D. A. Chase, Cambridge.

The following amendment to the by-laws was adopted:

"All resolutions hereafter offered for the consideration of this Society shall be presented in writing, conformably with parliamentary usage, that they may be considered and amended if deemed expedient."

Questions of practice coming up for consideration, Dr. Brown reported a case of the successful treatment of Ovarian Dropsy by the use of *Viburnum prunifolium*.

Dr. D. A. Chase reported a case of acute Gastritis, and gave his method of treatment.

The Society adopted a resolution requesting him to make his report in writing at the next regular meeting.

Drs. Brown, Edson and Willson were appointed essayists for the next meeting.

The Society then adjourned till the first Tuesday of December, 1870.

H. E. FINKLE,
Recording Secretary.

The Eclectic Medical Society of the Twelfth Senatorial District, met at the American House in the city of Troy, December 27, 1870.

The recording secretary being absent, Dr. John Willson acted in his place.

Drs. John Willson and H. E. Finkle were appointed delegates to attend the annual meeting of the Eclectic Medical Society of the State of New York, for the year 1871.

An assessment of one dollar was made on each member, and Dr. Chase, the treasurer, ordered to pay the indebtedness of the Society and its annual dues to the State Society.

At the afternoon session, Dr. Finkle approved and read the minutes of the previous meeting, which were approved.

Dr. Edson read an essay on Membraneous Croup.

Dr. D. A. Chase presented a paper on *Pyrolia rotundifolia*, setting forth its virtues for local treatment of wounds to facilitate healing by the first intention. He makes a tincture with two parts of alcohol and one of water.

The following resolution was adopted:

Resolved, That Dr. Chase is hereby requested to ask the attention of the members of the Eclectic State Medical Society, to the properties of the *Pyrolia rotundifolia*, with a view to the procuring of a chemical investigation of the same.

Dr. Willson reported a case in Obstetrics which proved to be a false conception.

A resolution was adopted, asking him to prepare a written report, to be transmitted to the Eclectic State Medical Society.

Dr. Martin reported a case of Salivation produced by *mercurius* (corrosive sublimate) which had been administered by a Homœopathic physician.

Dr. Finkle, the Secretary, reported a case of Stricture of the Urethra, treated by him in November last.

The Society adjourned, subject to the call of the President.

H. E. FINKLE, *Recording Secretary.*

ECLECTIC MEDICAL SOCIETY OF THE FOURTEENTH SENATORIAL DISTRICT.

No report has been received.

ECLECTIC MEDICAL SOCIETY OF THE THIRTEENTH AND FIFTEENTH SENATORIAL DISTRICT.

A regular meeting of the Eclectic Medical Society of the Thirteenth and Fifteenth Senatorial Districts, was held at the office of Dr. A. W. Russell, in the city of Albany, June 1st, 1869.

The President, Dr. R. J. Burton, took the chair, and Dr. A. W. Russell acted as Secretary *pro tempore.*

The annual report of the Treasurer was presented and approved.

The following resolution was offered by Dr. Russell and laid on the table till the next annual meeting.

Resolved, That the Constitution of this Society, be so amended, as to provide that the officers shall continue till others are chosen; at which time, all books, papers, and other articles, shall be delivered to the successors so elected.

The Society adjourned till the second Wednesday of June, 1870.

A. W. RUSSELL, M. D.,
Secretary pro tem.

No meeting was held in 1870.

ECLECTIC MEDICAL SOCIETY OF THE EIGHTEENTH SENATORIAL DISTRICT.

Fifth Annual Meeting.

The fifth annual meeting of the Eclectic Medical Society of the Eighteenth Senatorial District of New York, auxiliary to the State Eclectic Medical Society, was held at the American Hotel, July 12th, 1870. The meeting was called to order by the President, Lyman Stanton, M. D. The proceedings of last annual meeting were read by the Secretary and approved.

The Treasurer reported the financial condition of the Society.

The following proposals for membership were submitted by Dr. A. P. Hale: Drs. S. J. Douglass, David D. Douglass, and J. N. Betts. On balloting, the candidates were admitted to membership.

The President ordered the reading of that portion of the act of the Legislature in reference to the organization of county and district societies.

The Board of Directors submitted the following report, viz.: "That since the Society was organized, January 11th, 1866, it has held its regular annual meeting at Watertown, Jefferson county, New York; and at such meetings many very interesting reports of cases, essays, and new remedies have been read before the Society, and interesting and instructive discussions had; a deeper feeling in favor of sanative medicine and safe agents in the treatment of disease is manifest.

"Although many valuable members of the Society have removed west and to other places, new members have been added, and the pioneers in medical reform are encouraged in their work.

"The Society has made its annual reports to the State Eclectic Medical Society, and is in a sound condition financially."

A committee was appointed to make nominations for officers for the ensuing year, consisting of Drs. Allen, Rega, D. D. Douglass. The committee report the names of the present officers; the report accepted and was unanimously adopted.

Dr. Heaton read an essay relating to the qualification of physicians, their duty to their patients and each other.

Dr. Hopkins exhibited specimens of cancer tumors which he had removed. The successful treatment he promised to send into the Secretary, for recording.

A discussion followed on scarlet fever and its successful treatment.

Dr. Stanton reported a case of Urinary Calculi. The stones were passed from a child, the smallest one-eighth of an inch in diameter. The child was but nine months old, and the largest, which was one-fourth of an inch in diameter, and three-fourths inch long when she was twelve months old. The patient is now fourteen months old and apparently in good health.

Dr. Stanton reported a case of Ascites or Peritonial Dropsy, and its successful treatment by himself. He required the bathing of the surface twice a day, and administering small doses of lobelia and golden seals, three times a day, and apocynum or bitter root at night with active exercise. The patient was thirty-seven years old.

The Doctor also reported a case of Intestinal Obstruction, caused by eating dry comfrey root. This case was treated with enemas of lobelia, fomentations to the bowels and slippery elm mucilage. Other means had been resorted to and failed.

Dr. Waful spoke on the use of antispasmodics, and described cases which he had treated with antispasmodics, as lobelia, after they had been given over by Old School physicians.

Meeting adjourned, to meet at the American Hotel, in Watertown, on the second Tuesday in July, 1871.

L. STANTON, *President.*

J. A. Rega, *Secretary.*

ECLECTIC MEDICAL SOCIETY OF THE THIRTY-SECOND SENATORIAL DISTRICT.

The annual meeting of the Eclectic Medical Society of the Thirty-second Senatorial District of the State of New York, was held in Dunkirk, at the Eastern Hotel, January 4, 1870, eleven o'clock A. M.

Dr. C. C. Johnson, Vice-President, in the chair; A. P. Parsons, Secretary.

Members present: H. C. Taylor, A. D. Brooks, G. W. Carpenter, C. Babcock, O. H. Simons, J. B. Chase, N. F. Marsh, M. M. Fenner, W. L. Wilbur.

Several who were not members were present and invited to remain.

Minutes of the last meeting were read and approved.

The reports of the Secretary and Treasurer were read, accepted and placed on file.

The chairman of the committee (A. P. Parsons) appointed to prepare a history of Eclecticism in the Thirty-second Senatorial district of the State of New York, read the manuscript, and were granted further time to perfect the same, and have it ready for publication at the next annual meeting.

The Committee on Nomination of Officers for the ensuing year reported the following, who were unanimously elected:

President, C. C. Johnson, M. D.; *Vice-President*, A. D. Brooks, M. D.; *Treasurer*, H. C. Taylor, M. D.; *Secretary*, A. P. Parsons, M. D.; *Censors*, O. H. Simons, M. D., G. W. Carpenter, M. D., W. L. Wilbur, M. D.

Essays were read by H. C. Taylor, on Dropsy; M. M. Fenner, on Paralysis; W. L. Wilbur, on Medical Progress; A. P. Parsons, on Nervous diseases.

Cases in Practice reported by O. H. Simons: Gonorrhea and Secondary Syphilis; treatment given.

G. W. Carpenter reported case of Tumor, and presented the arm with tumor attached, which he amputated twelve days previous; he was requested to prepare the report for publication.

J. B. Chase reported on Rheumatism.

The resolution to amend the constitution was lost.

Resolved, That article 2d of by-laws be so amended as to read, "in place of all dues until the next annual meeting." (Carried.)

Resolved, That article 3d of by-laws be so amended as to read, "dues one dollar per year, from January 4th, 1870."

Resolved, That the by-laws be suspended by unanimous consent in order to act upon the preceding resolutions immediately.

Resolved, That the financial year of this Society be changed from May 1st, to commence with the annual meeting in January.

A certificate of membership was granted Alfred Ayers, in accordance with article sixth of the constitution, and delivered by the Board of Directors.

Appointments for the next meeting:

On Essays.—Drs. O. H. Simons, M. C. Belknap, A. D. Brooks, J. A. Salisbury, P. Sage, A. P. Phillips.

Special Reports.—Dr. A. P. Parsons, Dysmenorrhea; Dr. J. B. Chase, Spermatorrhea; Dr. N. F. Marsh, Cholera Infantum; Dr. H. C. Taylor, Chorea; Dr. M. M. Fenner, Epilepsy.

Orator for the next Annual Meeting.—Dr. C. W. Babcock.

Delegates appointed to attend the meeting of the State Society, to be held in Albany, January 26th and 27th, 1870: Drs. G. W. Carpenter, A. D. Brooks, A. P. Parsons. *Alternates.*—Drs. J. B. Chase, M. M. Fenner, O. H. Simons.

The annual oration was read by Dr. N. F. Marsh.

Adjourned, to meet in Jamestown, on the 18th day of May, 1870 (third Wednesday), at one o'clock P. M.

A. P. PARSONS, M. D.,
Secretary.

C. C. JOHNSON, M. D., *President.*

May 18, 1870.

The Eclectic Medical Society of the Thirty-second Senatorial District met pursuant to adjournment, at the Jamestown House in Jamestown, on the third Wednesday, 18th day of May, 1870, at one o'clock P. M. C. C. Johnson, President. Minutes of the last meeting read and approved.

Dr. M. M. Fenner read a paper on Epilepsy, and a report of cases treated on the principles set forth in the report.

Dr. O. H. Simons read a paper on Strychnine; minutely considering its toxicological influences on the human system, the most efficient and reliable antidotes; also its applicability in the treatment of Atonic Dyspepsia, Diarrhœa, Dysentery, Cholera, Diabetes Mellitus, Epilepsy, Chorea, Paralysis and Delirium Tremens.

Dr. M. C. Belknap read a paper on Alimentation, which elicited free discussion, was very interesting.

The papers were all referred to the Committee on Publication.

The following delegates were chosen to attend the meeting of the State Society, to convene at Rochester, June 15th and 16th, 1870:

Drs. G. W. Carpenter, C. C. Johnson, O. H. Simons, M. M. Fenner.

Appointments for next meeting:

On Special Reports.—Dr. N. F. Marsh, Cholera Infantum; Dr. J. B. Chase, Spermatorrhea; Dr. H. C. Taylor, Chorea; Dr. A. P. Parsons, Dysmenorrhea; Dr. M. C. Belknap, Diarrhœa.

On Essays.—Drs. A. Phillips, P. Sage, J. A. Salisbury, A. D. Brooks, James Fenner, M. M. Fenner, O. H. Simons, G. W. Carpenter.

Resolved, That the thanks of this Society, are tendered the gentlemanly proprietor of the Jamestown House, A. M. Sherman, for his many kindly personal attentions and courtesies.

Resolved, That the thanks of the Society are hereby tendered the Advertiser and Union, Jamestown Journal, Chautauqua Democrat, Fredonia Censor and Chautauqua Farmer, for kindly publishing the announcements of the meetings and proceedings of the Society heretofore.

Resolved, That a copy of the proceedings of the present meeting, be offered the above-named papers for publication.

Adjourned to meet in Fredonia on the first Wednesday in September next, Sept. 7th, 1870.

C. C. JOHNSON, M. D.,
President.

A. P. Parsons, M. D., *Secretary.*

September 7, 1870.

The Eclectic Medical Society of the Thirty-second Senatorial District, convened at the Library Association Rooms, Wednesday September 7, 1870, at 1 o'clock, P. M.

President, Dr. C. C. Johnson, in the chair; M. M. Fenner, Secretary *pro tem.*

Some fifteen members were present, and the session was a very interesting one, the time being principally occupied in the report of cases and discussions.

Dr. N. F. Marsh read a paper on Cholera Infantum, which called forth a lively discussion.

Dr. W. L. Wilbur read a paper on Recurring Abscess in the Chest, which involved many anomolous and peculiar symptoms.

Other reports of cases were made on the subjects of Hemorrhage, Splenitis, Dysmenorrhea, etc.

Resolutions were adopted, tendering the thanks of the Society to the Library Association for the use of their Rooms, and also to the Press for their promptness in publishing our proceedings, etc.

The following appointments were made for the next meeting.

On Essays.—Drs. A. A. Hubbell, N. F. Marsh, A. S. Davis, G. W. Carpenter.

Special Reports.—Dr. A. P. Parsons, on Dysmenorrhea; Dr. J. B. Chase, on Hysteria; Dr. H. C. Taylor, on Chorea; Dr. W. L. Wilbur, on Phthisis Pulmonalis; Dr. A. D. Brooks, on Pneumonia.

Adjourned to meet in Dunkirk on January 3d, 1871 (first Tuesday).

C. C. JOHNSON, M. D.,
President.

M. M. FENNER, M. D.,
Secretary pro tem.

January 3, 1871.

The Eclectic Medical Society of the Thirty-second Senatorial District, State of New York, assembled at the Eastern Hotel in Dunkirk, Tuesday, January 3, 1871, at 10 o'clock, P. M.

Members Present.—C. C. Johnson, M. D., *President;* A. P. Parsons, M. D., *Secretary;* Drs. A. S. Davis, C. Babcock, M. M. Fenner, G. W. Carpenter, A. Ellsworth, A. Ayres, A. F. Jennings, H. C. Taylor.

Minutes of last meeting read and approved.

Dr. A. S. Davis read an essay on Medical Education.

Dr. H. C. Taylor read an essay on Chorea.

Dr. A. P. Parsons read a treatise on Dysmenorrhea. Papers referred to Committee on Publication.

Delegates to attend the State Medical Society were chosen, viz.: Drs. O. H. Simons, M. M. Fenner, A. P. Parsons, A. D. Brooks.

For permanent members of State Society the following were chosen: Drs. J. B. Chase, G. W. Carpenter.

The Oration was read by Dr. C. W. Babcock.

The committee on the election of officers reported, and the following were elected officers for the ensuing year:

Dr. G. W. Carpenter, M. D., *President;* J. A. Salisbury, M. D., *Vice-President;* C. W. Babcock, M. D., *Treasurer;* A. P. Parsons, M. D., *Secretary.*

Censors.—Drs. A. P. Parsons, M. M. Fenner, A. S. Davis.

The thanks of the Society were voted to the retiring officers for the prompt and efficient manner in which they have discharged their duties.

A resolution was moved and adopted authorizing Dr. A. P. Parsons to see to the printing of our fee-bill and to furnish each member of the Society with two copies and draw upon the Treasurer for the amount of bill and postage.

Fee Bill of the Eclectic Medical Society of the Thirty-second Senatorial District, New York, Adopted at Jamestown, Jan. 11, 1866.

1. Office prescriptions, in ordinary cases, fifty cents to one dollar.

2. Professional visit within half a mile from physician's office, one dollar. Traveling fees for a greater distance, fifty cents per mile. Additional fee for night service, bad roads or stormy weather, twenty-five cents per mile.

3. Rising at night and professional visit within half a mile of physician's office, two dollars.

4. When there is more than one patient in the same family, for each additional prescription, fifty cents to one dollar.

5. Detention beyond the usual time of a visit, for each hour so detained, one dollar.

6. Consultations, five dollars. Traveling fees to be added.

7. Lancing felons, small abscesses and boils, extracting teeth and vaccination, fifty cents to one dollar.

8. Cupping, inserting seton or issues, one dollar.

9. Surgical assistance at office, such as dressing wounds, removing tumors, opening large abscesses, one dollar to ten dollars.

10. Removing foreign bodies from the ear, eye or nose, fifty cents to two dollars.

11. Removing foreign bodies from the throat, one dollar to three dollars. If operation required, ten dollars.

12. Operations, such as the removal of uterine polypus, encysted

mammary tumors, fistula in ano, hare lip, removal of sequestra or necrosed portions of bones, radical cure for hydrocele, ten dollars to fifty dollars.

13. Capital operations, as amputations of large limbs, lithotomy, cataract, excision of large tumors, fifty dollars to one hundred and fifty dollars.

14. Reducing dislocations of large joints, fifteen dollars to fifty dollars. Reducing dislocations of small joints, three dollars to ten dollars.

15. Reducing fracture of thigh, twenty dollars to forty dollars. Reducing fracture of leg, ten dollars to twenty dollars. Reducing fracture of arm or clavicle, ten dollars to fifteen dollars.

16. Subsequent dressing of thigh, three dollars. Subsequent dressing of arm and clavicle, one dollar. Traveling fees in all cases to be added.

17. Cases of obstetrics, day time, six hours or less, ten dollars. For longer detention, per hour, one dollar. Twin cases, extra, three dollars to five dollars. Using instruments, embryotomy, etc., extra, ten dollars to fifty dollars. If not present till after the delivery of fœtus, one-half the fee to be deducted. If not till after the delivery of placenta, only ordinary charge for visit. Cases of abortive and premature labor, the same.

18. Passing catheter or bougie, in addition to other service, one dollar.

19. Venereal. Gonorrhea, ten dollars to fifty dollars. Primary syphilis, twenty dollars to fifty dollars. Secondary syphilis, fifty dollars to one hundred and fifty dollars.

20. Administration of chloroform, one dollar to two dollars.

21. Examinations for medico-legal purposes, requiring attendance at court, twenty-five dollars to fifty dollars.

22. For services rendered and operations performed not here mentioned, just and fair charges to be made, in harmony with the rates above specified.

23. Physicians who furnish medicines will charge a fair compensation for them in addition to rates established for their services.

The Committee on the History of Eclecticism in the Thirty-second district, were furnished new facts and items in relation to its early development, and were instructed to take further time to perfect the report.

Essayists appointed for the next Meeting.—Drs. N. F. Marsh, O. H. Simons, A. Hubbell, C. C. Johnson.

Special Reports.—Dr. J. A. Salisbury, Fever peculiar to Oil Creek; Dr. A. D. Brooks, Chill Fever; Dr. J. B. Chase, Fluid Extracts; Dr. A. Ayers, Chronic Diseases; Dr. M. M. Fenner, Surgery; Dr. A. P. Parsons, Uterine Diseases.

Orator for next Annual Meeting.—Dr. G. W. Carpenter.

Resolutions expressing the thanks of the Society were passed to the gentlemanly proprietor of the Eastern Hotel (Walter Finkle), and also to the press, for favors received.

Adjourned, to meet in Mayville, Wednesday the 24th day of May, 1871, at ten o'clock, A. M.

C. C. JOHNSON, M. D.,
President.

A. P. Parsons, M. D.,
Secretary.

Mayville, Third Wednesday, *May* 24, 1871.

The Eclectic Medical Society of the Thirty-second Senatorial District, New York, convened at the Chautauqua House, in Mayville, May 24th, 1871; eleven o'clock A. M. G. W. Carpenter, President; A. P. Parsons, Secretary.

Members present: Drs. J. A. Salisbury, C. C. Johnson, N. F. Marsh, M. M. Fenner, M. Marsh, A. D. Brooks, H. C. Taylor, J. Phillips, O. H. Simons, P. Sage, J. B. Chase, D. Storer, J. J. Bowen, C. J. Phillips, E. S. Northrup, N. F. Marsh.

An essay was read by Dr. C. C. Johnson; subject, Correct Diagnosis.

Dr. Salisbury reported on his subject: Fever peculiar to Oil Creek; or, what is called Oil Creek Fever. A free and spicy discussion followed, until an adjournment was moved for one hour for dinner.

At half-past one o'clock P. M., the Society reassembled, and Dr. P. Sage read a paper on the subject of reproduction of the human species.

Dr. M. M. Fenner reported a case of Nasal Polypus and Secondary Syphilis; successfully treated.

Dr. O. H. Simons reported a case of Acute Insanity, of two weeks' standing, in a lad fourteen years of age, and cured by hydrate of chloral.

Dr. A. P. Parsons presented a paper on Uterine Diseases.

Dr. J. B. Chase made a verbal report on Fluid Extracts.

All the papers presented were referred to the Committee on Publication, and Dr. P. Sage was requested to continue the subject of reproduction, and present another paper at the next meeting on that subject.

Dr. M. M. Fenner presented the compliments of Captain Grandin, of the steamer Jamestown, with an invitation to take a pleasure excursion to Bemus Point on Chautauqua lake, upon his boat, which was accepted.

Appointments for the next meeting as follows:

On Essays.—Drs. J. A. Salisbury, C. C. Johnson, O. H. Simons, D. Storer, M. M. Fenner.

Special Reports.—Dr. N. F. Marsh, Typhoid Pneumonia; Dr. H. C. Taylor, Nephritic Diseases; Dr. A. P. Parsons, Uterus and its Appendage; Dr. J. B. Chase, Fluid Extracts; Dr. P. Sage, Reproduction; Dr. A. D. Brooks, Chill Fever; Dr. J. P. Phillips, Rheumatism.

Adjourned on board the steamer Jamestown.

Resolutions of thanks were passed for courtesies and favors received from the proprietor of the Chautauqua House (Mr. Horace Fox), and also to the reporters representing the Advertiser and Union and Jamestown Journal.

Resolved, The thanks of the Society be tendered Captain T. E. Grandin, for the courtesy of a pleasure ride on Chautauqua lake, on board the steamer Jamestown; and also,

Resolved, We recognize in Captain Grandin, a polite and courteous officer, and in the steamer Jamestown a safe, commodious and elegantly appointed craft, well-calculated to contribute to the enjoyment of all who pass over this beautiful lake.

Adjourned to meet in Mayville on the 13th day of September, 1870, at 10 o'clock A. M.

G. W. CARPENTER, M. D.,
President.

A. P. PARSONS, M. D.,
Secretary.

NOTE.—No report has been received from the other auxiliary societies, except the Eclectic Medical Society of the Thirtieth District, which was deposited in the New York city post office, but never received.

ECLECTICS IN GREAT BRITAIN.

For five years past the Eclectic physicians of Great Britain have maintained successfully an organization under the title of "The British Eclectic Medical Association." At its annual meeting, for 1869, the following officers were chosen:

President, Dr. J. H. Blunt, of Northampton; *Vice-President*, Dr. Thomas Stowell, of Brighton; *Treasurer*, Dr. J. H. White, of Leeds; *Secretary*, Dr. J. F. Payne, of Leeds. Dr. Payne was a former president; also Dr. Dennis Turnbull, of Cheltenham, senior editor of The New Era of Eclecticism, an exponent of the doctrines of the Association.

The last annual conference was held at Leicester, on the 7th and 8th of July, 1870. We have not the particulars of the session at hand. There were about thirty candidates for graduation, who were examined by the council of the Society on the first day. The meeting of the Association took place on the 7th, at Temperance Hall. In the evening a discussion took place upon "The Medical Aspects of the Age," and Vice-President Stowell, President Blunt, Dr. Skelton, of Plymouth, Dr. Parkinson, of Oldhouse, Dr. Thomas, of Newcastle-upon-Tyne, past President Turnbull and others, delivered addresses.

Books of subscription have been in circulation under the auspices of the Association to obtain money for the endowment of a hospital to be in the charge of eclectic practitioners, and our transatlantic brethren bid fair to anticipate us in the taking of this step. This is greatly to their credit, but it reflects little honor upon this country, where eclectic medicine was born and swaddled.

"The New Era of Eclecticism" has just completed its second year; Dr. Turnbull, of Cheltenham, is its editor. It is ably conducted, but takes more radical ground than would be acceptable to a large part of the eclectic physicians of America. It adopts for its watchword "Positive Organic Medicine," dropping entirely the employment of minerals as remedies, assailing the use of ether and chloroform in surgery as largely increasing the rate of mortality in operations, and

denouncing vaccination as an outrage upon the known laws of health and physiology, failing to protect the system against small-pox, but adding to the risks from other diseases. American eclectics are approximating in several particulars to the same convictions, but there is no uniformity of sentiment. In due time, however, we will all see eye to eye.

In Great Britain all licensed practitioners are enrolled in the "Medical Register." Those physicians not there recorded are without the pale of authority. There being no institution in that country to instruct in eclectic medicine, our *confreres* over the water must either enter the colleges of the old school, or content themselves with instruction from private tutors. The "Eclectic Medical Reform Association" will grant them their diploma, but this, we believe, does not warrant them a place in the "Medical Register." It may be proper to remark that in England the old school practitioners are as bigoted, as implacable, as mean and ungenerous as we too often find them here. Hence the lines of demarkation are strictly drawn, and those embracing eclectic doctrines are eclectics in right earnest.

REPORT ON SURGERY.

MADE AT THE ANNUAL MEETING OF THE ECLECTIC MEDICAL SOCIETY OF THE STATE OF NEW YORK, JANUARY 25TH, 1871.

By Edwin Freeman, M. D.,
Professor of Surgery of the Eclectic Medical College of the City of New York.

Mr. President and Fellows of the Eclectic Medical Society of the State of New York.—In looking over the reports of the progress of surgery for the past year, I find that there has been some advance toward finding out new things, and some progress in establishing the use of those already known.

Numerous cases are reported of the successful treatment of traumatic tetanus by subcutaneous injections of the alcoholic extract of calabar bean, a half grain to six grains being used, at once, at intervals as often sometimes as every two hours. Cases also are reported of the successful treatment of this formidable disease, by an infusion of lobelia inflata, administered in sufficient doses only, to constantly nauseate the patient, and keep him in a profuse perspiration. The lock-jaw was relieved by enemas of the same infusion. In a case of threatened tetanus, resulting from a forefinger being crushed off at the second phalanx, by a hay-cutter, in which I performed amputation at the joint, I was able to arrest the disease by the internal use of fluid extract of gelseminum and fluid extract of lobelia, sem.; I gave five drops of each every fifteen minutes, and was also obliged to give hypodermic injection of morphia sulph. gr. one-fourth, and repeat in about an hour. The patient recovered. There was violent spasmodic contraction of the muscles of head and neck, but the jaws were not fixed. I have used, with great success, a new caustic for extirpation of the tonsils. It is Mackenzie's London paste. Dr. Ruppaner reports a number of cases treated by it. The caustic is made by adding together equal parts of caustic lime and caustic soda. It is to be kept dry, in a bottle well corked. On using it, a sufficient quantity is to be mixed

with a few drops of alcohol, so as to make a paste of some degree of consistence, which is to be applied to a part of the tonsil, with a glass rod pressed firmly against it and then withdrawn. A black slough will form, which, in a few days will be cast off, and it may be then reapplied, or it may be applied sooner to the other tonsil if necessary. By this method they are soon removed.

We notice in a report in the Edinburgh Medical Journal, a case of the removal of the kidney. by Prof. G. Simon, of Heidelberg, the only instance in which such an operation has been performed. It is the more remarkable, as the woman had been operated on before, and the ovary and uterus, with a part of the ureter, which was imbedded in the ovarian tumor, were removed. The extirpation of the kidney was attempted because of the flow of urine through a fistulous opening, as a result of the former operation. The patient survived and was in a satisfactory state of health.

Petroleum is recommended by a Bengal professor as a valuable agent for antiseptic surgical dressings and as a stimulating and detergent application in sloughing and ulcerating surfaces. White of egg and sweet oil, equal parts, are used and highly recommended for burns and scalds, by Dr. Kennedy of Iowa. I have used the white of egg alone, with good results. Torsion, as a substitute for ligature, is strongly urged by English surgeons. It has been used in all the amputations without any unfavorable result. A treatment for incontinence of urine is proposed and used with good results. The prepuce is drawn forward, and the orifice sealed with collodion every night; the collodion remains until morning. At first, a small quantity of urine is found in the morning distending the prepuce; and this soon ceases, and the patient is cured. A new method of curing old ulcers is proposed, and a considerable success attends it. It is by transplanting a small portion of skin, the size of a pea or smaller, clipped from a healthy surface, to the surface of the ulcer. It grows there, and the surface begins to heal from the border of that until it meets the border of the ulcer. I call your attention, also, to the use of iodoform in old sores; it is sprinkled over the sore and followed by a water dressing. The use of the chloral hydrate has been greatly extended as an internal agent, with good results. It has been observed of it, that sometimes its effects are cumulative, from imperfect absorption in the stomach, and serious results have followed; it is not much used in surgical operations; hence it should not be repeated too often in large doses. Care should be taken that the arti-

cle is pure. The use of coffee in strangulated hernia, to facilitate its reduction though not new is worthy of your attention. It was administered in a case reported in the Richmond and Louisville Medical Journal, for May, 1870. Twelve cups of boiling water were added to half a pound of ground parched coffee and a cup of the infusion given every twenty minutes. After the fifth cup had been given, the tumor was examined and found to be easily reducible. In this case, the surgeons had failed to reduce it under chloroform.

In the treatment of scrofula and its diseases I have found excellent results from the use of a syrup which may be called a compound syrup of figwort. It is made thus: ℞. Figwort lbs. 2, blue flag lbs. 1½, burdock root lb. 1, bayberry root lb. 1½, butternut (inner bark of root) lb. 1, mandrake root lb. ¼, queen's root lb. 1½, coriander seed ℥ iij, prickly ash berries ℥ iij. M. Cover with alcohol (proof), digest for five or six days; add water, and steep sufficient to make two and a half gallons; add ten pounds of sugar and two quarts of whiskey. Dose, one to two tea-spoonsful, three or four times a day. In this preparation there is an agent to act on all the different emunctories of the system. These agents are not new, but this combination is very effective. A contribution has been made to eclectic surgery in the literature of our profession, by Prof. A. J. Home, of Cincinnati, who has published a work on Fractures and Dislocations, during the past year. The different medical journals furnish their respective quota of medical and surgical news.

We urge upon the eclectic profession the necessity of their making an effort to place our branch of the profession on an equal footing with the others, by taking measures for establishing a hospital for the reception and treatment of cases, medical and surgical, by the eclectic method. This will bring us more prominently before the people, and demonstrating by practice, as only can be in such an institution, what we so often assert, viz., the superior success of the eclectic practice of medicine.

EDWIN FREEMAN, M. D.,
Prof. of Surgery.

CASES IN SURGICAL PRACTICE.

READ BEFORE THE ECLECTIC MEDICAL SOCIETY, THIRTY-SECOND DISTRICT NEW YORK, AT MAYVILLE.

BY M. M. FENNER, M. D.

NASAL POLYPUS.

Mr. T., æt. about fifteen, applied to me, January 12th, 1870, for nasal polypus. He had suffered from the disease several years. Has had it removed a year before, but it soon returned. Breathing mostly through mouth, and his speech was affected as one having a recent catarrh in the head. He was a healthy, active, finely developed young man. The polypus could be plainly seen when he made an effort to force it down, as if blowing the nose. It was soft or pultaceous, or what is known as the mucous variety, as distinguished from the fibrous or cancerous.

TREATMENT.

With a pair of polypus forceps, I removed as much of the tumor as possible, and applied to the remaining portion, as well as the surface from which I had torn, chloride zinc paste; I continued to do this, every few days, for some time. From January 12th to March 3d, I had given him seventeen such treatments. Some of the time the polypus seemed to grow between treatment as much as I had succeeded in removing or destroying. I finally used the zinc paste very strong, almost simple deliquesced zinc. At the day of the last treatment, March 3d, it seemed all removed, as far as probing or inspection with reflected light could discern, yet the obstruction to speech and breathing continued nearly the same. I finally got my forceps hold of a substance far back in the posterior nares, which gave him no pain on pinching. With gentle traction I withdrew the specimen I show you, now much condensed and hardened by the action of alcohol for over a year, but still as large as a small size hen's egg. It

passed the nasal canal with difficulty, causing painful distension, yet it was soft and brain like, elongating itself to accommodate the size of the opening. It is convoluted, and has two distinct lobes. Its attachment was so far back as to obstruct the breathing mostly through both nostrils, though more perfectly of the right. Its surface of attachment is between the lobes, and it is probable the lesser lobe extended more or less into the left nostril, while the larger one completely filled the right. Natural breathing and speech were resumed at once. A thorough application of the zinc paste to the surface of the posterior nares, as completely as possible completed the treatment. Over a year has passed without any return of the disease as I am aware of.

Constitutional Syphilis.

Mrs. A., æt. about thirty-five, contracted the disease from her husband in 1861. Had been treated by various physicians in Dunkirk, Erie and Milwaukie since most of the time. I visited her Nov. 26th, 1869, about eight years after the disease was contracted; found her reduced in flesh to mere skin and bones; weighs about ninety pounds; usual weight about 140. Left eyelid was positively eaten off; ulcer from left forehead to eye, nose, cheek and chin; velum and evdulum palati eaten off, and throat and fauces a raw, ulcerating surface. Deep ulcers were found in her calves, thighs, arms and arm-pits, some so large as to admit nearly the clenched fist; all the sores were covered with a light, grayish crust, with coppery margins. Most of what was attempted to be swallowed was regurgitated through the nose. Had not menstruated for some months. A more offensive, disgusting and pitiable sight I never beheld. Took her under treatment and prescribed as follows:

℞.	Iodide of Potassium,	ʒ v.
	Liquor of Potassa,	f. ʒ v.
	Fl. Ext. Sarsaparilla, comp.,	℥ iv.
	Water, to make	0 ij. M.

Two (2) table-spoonsful, sweetened to suit the taste, four (4) times a day.

℞.	Carbolic acid,	ʒ ijss.
M.	Water,	℥ xii

Use as gargle and wash the throat and ulcers once in two (2) hours.

She was unable to swallow more than a tea-spoonful of the medicine, at a dose, for the first few days. Improvement began soon,

however, and she went rapidly on to full doses. This treatment was continued two months, at which time her throat had become entirely well. I gradually increased the iodide of potassium and liquor potassa until she got one-half drachm of each at a dose, repeating only three times a day. Simple ointment was applied to the ulcers at this time. The improvement went on uninterrupted; she menstruated, gained in appetite and flesh. It was continued, though in less quantities, after a few months more elapsed, till about the first of March, 1871, or fifteen months in all. There was never any interruption in the improvement, except about the sixth month, when I took her off the medicine and substituted simple vegetable alteratives and bitters. She fell rapidly back till I resumed the old treatment, and then she as rapidly gained. It was about nine months before the last ulcer of thigh healed. Since then there has been no ulceration anywhere. It is now May 24th; she has had no treatment since February last, weighs about 140; in perfect health every way, much better than she had enjoyed before her misfortune. The only evidence of her disease now is the loss of part of one eyelid, palate and scars of face and limbs, showing how terrible had been the ulcerations.

So far from reducing, according to the commonly received action of iodide of potassium, it seems to spend its force in neutralizing the virus with which her system was charged, and she actually gained flesh and strength every day; she took it for more than fifteen months. The large doses (ʒ ss) caused no great uneasiness; only sometimes a little dizziness, and feeling as of recent catarrh of the head.

FREDONIA, N. Y., *May* 23, 1871.

ON STRICTURE OF THE URETHRA.

READ BEFORE THE ECLECTIC MEDICAL SOCIETY OF THE STATE OF NEW YORK.

By Edwin Freeman, M. D.,
Professor of Surgery in the Eclectic Medical College of the City of New York.

Stricture of the urethra is a narrowing of the canal of the urethra, either slight, or to the degree that no instrument can be passed through it; or that but a drop of urine can find its way out; or that nothing can pass through it, which alone is the condition of a completely impermeable stricture. This narrowing is often, at first, the result of a spasmodic contraction of the wall of the urethra, producing spasmodic stricture. Many surgeons deny the existence of such a form of stricture. But, since it is demonstrated by Kolliker and others, that muscular fibers of a circular kind extend along the whole length of the canal, just beneath the mucous membrane, and only separated from it by elastic and areolar tissue, it is easy to allow what the experience of every surgeon has demonstrated to exist, a spasmodic contraction, possessing all the peculiarities of stricture. It is, in fact, spasmodic stricture. It is easily excited in irritable conditions of the system, in some persons, when the canal is injured by contact of an instrument, especially if urine come in contact with a raw surface. Exposure to cold and wet may cause it. The use of alcoholic stimulants, excessive sexual indulgence, derangement of the digestive organs, long retention of urine and mental emotion may either of them give rise to it. It may also result from reflex nervous action, excited by hemorrhoids or their ligature, fissure of anus, ascarides in the rectum, stone in the bladder, etc.

Symptoms.

A sudden inability to pass urine, or only to pass it by drops. This, if not complete, may soon pass off, or if complete, will soon leave under proper treatment, and leave no trace of its presence; but it

may recur from the same or similar causes, to that originally producing it.

Stricture may also result from urethritis, or an inflamed or congested condition of the mucous membrane. This may be from gonorrhœa or it may not. Any chronic inflammation of a portion of the mucous membrane of the urethra, may result in stricture, under certain conditions. If the urine is persistently acrid, so as to continually excite the inflammation; or if a person of robust habit, with this condition of urethra, especially in those of rheumatic diathesis, indulge to excess in alcoholic drinks, the inflammatory swelling, and engorgement of the urethra will be increased so that it will be greatly narrowed or completely closed at some point, and *congestive stricture* is the result. In this case, the closure is simply from the engorgement and thickening of the mucous membrane. It is easy enough to see how a combination of these conditions may also produce stricture. Urine rendered highly irritating by a night of carousing and debauchery, passing over the surface of congestive stricture of partial degree, may immediately produce a complete closure of the canal. There is often gleety discharge, redness and eversion of the lips of the urethra. Permanent or organic stricture is the most serious of the different forms of this disease. It is produced by a deposition of plastic lymph, or rather an excessive deposit of tissue producing material in the submucous tissue and often in the mucous membrane itself, as the result of constructive inflammation, which exhibits the same tendency to contract, as such deposits elsewhere, and finally closes up the canal. It is usually the result of inflammatory conditions or it may be produced by falls or kicks upon the perineum, causing destruction or sloughing of the urethra consequent on its being bruised, against the sharp edge of the subpubic ligament, producing traumatic stricture.

The most common *seat* of stricture is at the subpubic curvature of the urethra, which includes the whole of the membranous urethra, and extends forward to an inch anterior to its junction with the spongy portion. In this region, according to Mr. Thompson, who has thoroughly investigated this subject in 320 distinct strictures of the urethra, of all kinds, there were found 216, or sixty-seven per cent. At the external orifice, including two and a half inches behind it, there were found fifty-four, or seventeen per cent. While in the center of the spongy portion, including the region between those others, there were fifty-one cases or sixteen per cent. The most common seat is at

the junction of the membranous and spongy portion of the urethra; next one-inch anterior. It is rarer in the membranous portion; and, contrary to the general opinion, it is never or seldom found in the prostatic portion. Mr. Thompson states that there is not to be found a specimen of prostatic stricture in any of the hospitals of London, Edinburg or Paris, yet Ricord and D'Etiolles and others say that they have met with them.

Strictures are usually single, but there may be several (Hunter met with six, Calot with eight), and, in such cases, one is at the sub-pubic curve, and the others between it and the meatus. It may consist of a few fibers, which encircles the urethra like a thread, or may form a band of varying degrees of thickness. The former kind is like a thin diaphragm, passing entirely around the canal, like a ring, or only partly, like a crescent, and is called the linear or bridle, or pack-thread stricture, and by some the valvular stricture. If the fold be wider, it is called the base annular stricture, and if the fold be thickened it is called indurated annular stricture. Also, if the canal be involved in the stricture for half an inch or several inches, and at the same time deviated from its normal direction, it is called an irregular or tortuous stricture. A resilient stricture is one that will readily dilate for a large-sized bougie, but contracts to a small size on its withdrawal. Impermeable stricture, or complete obliteration of the urethra, so that a drop of urine will not pass, it is probable never occurs except as the result of wound of the urethra, either internal or external; yet non-traumatic strictures may become so close that the smallest instrument cannot be made to pass, although urine may trickle out. Mr. Syme himself, in some cases, admits that he was obliged to open the urethra in front of the contraction in order to guide with his finger the instrument through the stricture. Yet he has broadly asserted that a stricture that will allow urine to pass, can with care be passed by an instrument. Prof. Gross makes an assertion quite the contrary of Mr. Syme, and even Mr. Liston was often foiled in introducing an instrument, while, on the other hand, Mr. Erichson thinks that the worst strictures may with care be passed by an instrument. The urethra, in front of the stricture, usually preserves its caliber, if there be no other stricture. Behind it may become much dilated, even succulated, and the bladder thickened and fasciculated from the attempts to expel the urine. The ureters may become dilated from the urine distending the bladder, pressing against their mouths, and preventing them from being emptied. The kidneys become con-

gested and structually changed by the dilatation of their pelves and the impediment to the natural performance of their functions.

The constitutional symptoms resulting from stricture are loss of appetite, imperfect digestion, and a generally irritated condition of the nervous system, proportioned in degree to the amount of irritation at the seat of stricture and to the tightness of the stricture. If the stricture be close, the bladder may never be entirely evacuated, and a certain quantity of old urine remaining in it, becomes decomposed and ammoniacal and a catarrhal condition of the bladder is established, with much discharge of mucus; or the elements of the urine may be reabsorbed and act as a disturbing element in the blood, producing various derangements. The narrowing of the canal may have been preceded by a gleety discharge, usually the sequel of gonorrhœa; this discharge appears some time after a clap has been cured, and is brought on by excessive exercise, sexual indulgence or hard drinking, etc. He soon finds that he has lost his usual power over the bladder; he cannot retain his urine long, and has to rise often nights to expel it; he has to wait some time before the stream appears, and cannot propel it with the strength of a healthy man; the stream is diminished in fulness; it may be twisted like a corkscrew, or fan-shaped, or divided, so that one part goes straight forward and the other falls directly to the ground, and may soil his dress or shoes. As the condition becomes more aggravated the symptoms become more marked. The urine will often dribble away and soil his clothes especially when asleep, from overflow of the urine, the bladder being excessively distended. Blood may pass with the urine, coming from bladder or urethra. Erection of penis and nocturnal emissions may frequently occur, or the patient may be incapable of a complete erection from pain in the urethra, and the semen may dribble away in coition, he not being able to ejaculate it. Hemorrhoids and prolapsus ani may result from the severe straining to evacuate the bladder. In severe cases the condition of the patient is truly pitiable; he is constantly straining to pass his urine and yet is unable to do it; he gets no rest day nor night. At last the urethra behind the stricture gives way and the decomposing urine is infiltrated into the tissue of the perineum, or, rarely, the bladder gives way and the urine escapes into the cavity of the peritoneum if that membrane be ruptured, or, if not, into the subperitoneal tissue, in either case resulting in his speedy death. If it escapes into the tissues of the perineum the relief of the urgent symptoms simultaneous with the appearance

of a brawny swelling of the perineum, penis and scrotum, with perhaps emphysematous crackling, and especially a discoloration, and quick tendency to gangrene, will indicate the nature of the difficulty. In this case free incisions with the scalpel into the scrotum or perineum toward the stricture so as to let out the urine from the tissues is the only indication in order to prevent serious and dangerous sloughing. The urethra ulcerates sometimes at the stricture, and its wall giving way, urine may escape in limited quantity, and becoming circumscribed, may form an urinary abscess, which at last appears on the external surface and discharges; its walls then contract, and a urinary fistula is formed, through which the urine may constantly pass, soiling the person's clothes, and rendering his condition in every respect very disagreeable. The cure of the fistula must be secondary to that of the stricture, and when the urine passes readily in its natural channel, the fistula will either close voluntarily or the proper application of caustic, or laying it open, will soon bring about that result.

Of the causes of stricture, gonorrhœa stands at the first of the list. Of 220 cases of stricture reported by Mr. Thompson, gonorrhœal inflammation was the cause in 164 cases; injury of the perineum in twenty-eight cases; these two causes being far in excess of any others in producing this disease. Of the 164 cases resulting from gonorrhœa, ten appeared immediately after or during the attack; seventy-one appeared within one year of its occurrence; forty-one appeared within three or four years; twenty-two appeared within seven or eight years; twenty are reported at periods between eight and twenty to twenty-five years.

Diagnosis.

The symptoms already enumerated, may very truly indicate the existence of stricture, but it is not certainly known to be that until a thorough exploration of the urethra establishes it beyond doubt.

The existence of sub-acute inflammation of the prostate gland, or of urethral neuralgia and hyperæsthesia, may give rise to symptoms closely resembling stricture, and deceptive results, which only an exploration, will remove. Exploration is best performed by steel sounds or silver catheters; or flexible catheters and bougies of various forms may be used. The course of the sounds or catheters should correspond as nearly as possible to the sub-pubic curve in the urethra which, according to Thompson, is an arc of a circle, three inches and a quarter in diameter. Mr. Erichsen prefers one equal to the fourth

of a circle, four and one-half inches in diameter. The best bougies are the French elastic, which increase by millimetres and are more flexible than the English, and have a tapering point. The size is important. Beginning at No. 1, they increase to No. 5 before the size of English No. 1 is reached, and increase in the same ratio to thirty. Bougies may be made of wax, gum elastic, whalebone, etc., according to the necessities of the case. For exploring, the French bougie with an acorn point is the most reliable bougie for detecting stricture, when it is even only a slight narrowing of the canal. For use in dilating the stricture, the olive-shaped point bougies are certainly the best, as they can be passed along the canal without catching in the lacunæ, and they easily insinuate themselves into the opening of the stricture, when the sharp point would catch at its border. Filiform bougies, of elastic or whalebone, with olive-shaped point, are extremely useful in finding their way through tight strictures, and can hardly be dispensed with. In exploring a stricture, the patient may stand up or lie down, and a large size, as No. 8 sound or bougie, should be passed until it reach the part affected. If one too small be used, it may pass beyond the stricture and it remains undetected. If it cannot pass, note may be taken of the length of the instrument engaged in the urethra, and a correct estimate made of the location of the stricture.

The treatment for spasmodic stricture is so to relax the system, that the local spasmodic tension will give way. A hot foot-bath and hip-bath, in slight cases, may be sufficient; the urine passing while in the hip-bath. If not, a thorough sweating, with the internal use of gelseminum and agrimony, in full doses, so that the specific effect of the gelseminum is obtained, will often open the stricture. Nauseating doses of lobelia may produce the same effect, if, at the same time, a brisk and non-irritating cathartic be given; the urine will pass as the cathartic operates. Often the sitting bath and an active dose of physic is sufficient. An opium or lobelia suppository in the rectum is often beneficial.

For the congestive form the internal administration of acetate or citrate of potassa, to correct the acidity of the urine, especially if there be a rheumatic diathesis, may be necessary in addition to the preceding treatment. Copious draughts of marsh mallow or flaxseed tea, or a tea of the cleavers, will tend to allay the irritability of the urethra. Hot salt in bags, against the perineum or hypogastrium, or hop poultices similarly applied, will produce an excellent effect.

Gelseminum or lobelia, with hyoscyamus and opium or morphine, or without, will be found useful. If these measures fail the catheter should be carefully passed and guided into the bladder by the finger in the rectum, if necessary, or a small sized bougie may pass where the catheter cannot. Chloroform may be administered, or some other anæsthetic, to facilitate the passage of the instrument, if great difficulty is experienced in passing it. The catheter may be retained, if, in the opinion of the surgeon, the ill effects of a frequent attempt to pass it counterbalance those of its retention; yet it is only in rare cases that this may be necessary. In both these forms, especially in the latter, after the relief of the urgent symptoms, a sound or bougie should occasionally be passed, and such other measures continued as are necessary to break up the inflammatory condition of the urethra and its tendency to spasmodic contraction. For the relief of the inflammation injections of a solution of borax or sesqui-carbonate of potassa, or even a solution of chloride of zinc, with morphine, may be found admirable. For the permanent relief of the spasmodic action the occasional passage of a bougie or sound, smeared with a mild ointment of belladonna, is very efficacious.

For the relief of permanent stricture the following are the modes of treatment most in use: First, dilatation; second, caustic; third, rupture; fourth, internal urethrotomy; fifth, external and perineal urethrotomy.

By *dilatation* is understood the passage of instruments through the stricture, gradually increased in size until of the size of the canal, which not only dilates it, but by pressure causes an absorption of the contractile tissue, until ultimately the stricture is cured. Dilatation is best performed with well-polished or nickeled sounds, when the stricture is not very close, and by flexible bougies, of small size and acorn pointed, when it is a tight one. Often filiform bougies are the only ones that can be passed at first, and these with difficulty; which are followed by those next in size, and so on. The instrument should be glided in gently, and a little force used only when the point is felt to be engaged in the stricture, otherwise the irritation will only increase the spasmodic closure of the part. In using much force, especially with a sound, against a tight stricture, the wall of the urethra is often penetrated by the side of the stricture, and a false passage made. In such a case it should be withdrawn, and, if possible, passed through the stricture, or a small instrument passed and retained for awhile, so as to press the valve-like opening of the false

passage together, that it may heal. When such a passage remains open it interferes materially with the cause of the treatment, as the instrument will often unavoidably slide into it instead of engaging in the stricture. In cases of great difficulty in passing a small bougie, sweet oil injected into the urethra, and retained by pressing against the *meatus*, will facilitate its passage by lubricating the borders of the stricture. I have found that oil will pass through, sometimes, when it has seemed impossible to get a filiform bougie through. In most cases it is well to let the bougie remain in from two to five minutes; or, as Sir Henry Thompson recommends, it may be withdrawn as soon as it has passed the stricture. It should not be again inserted until all the irritation from the previous insertion has subsided, not sooner than two to five days. In this way it may be gradually dilated, until a bougie of Nos. 22 to 26 or 30, of French scale, or 12 to 16 or 19 English, may be passed. Sometimes it becomes necessary to slit up the *meatus* before the large size instrument can be introduced. This can be done with a probe-pointed bistoury on a director in the canal.

Continuous dilatation is performed by introducing a catheter and retaining it for thirty-six or forty-eight hours. A purulent discharge is produced and the stricture rapidly expands, and then a larger may be introduced. This is not a safe method, as the urethra is liable to ulcerate, or earthy matter may be deposited in the instrument.

Over-distension is applied to a method of dilatation by an instrument constructed so as to be expanded within the stricture, by means of a screw working in the handle. It may be used with or without an anæsthetic, and requires from seven to ten minutes to expand it to its full size. A full sized gum catheter is passed and allowed to remain twenty-four hours. After a few days a large metallic sound is passed, and again occasionally for some time. This method, as well as those to be mentioned, is useful in those strictures which are dilatable to a certain degree and then resist all further efforts by bougies.

The *caustic* treatment is now generally superseded by the other methods.

Nitrate of silver or caustic potassa is passed by means of an instrument, well greased, to the stricture, and pressed against it and then withdrawn. This is repeated again in a few days for several times, and then the treatment by dilatation is continued. It is claimed that it partially destroys the stricture; but it is liable also to destroy the adjacent portion of the urethra, and is a dangerous and unsafe remedy.

Rupture of the stricture may be performed by sliding tubes, passed down upon a director previously passed through the stricture, or by a more favorite method, on the principle of a wedge. The latter is called Holt's method. It is performed by an instrument which consists of two blades, united at the point of the instrument but open at the other end. Into this, and between the blades, a hollow tube is forced upon a rod, until it passes down to near the end. It is necessary for the stricture to be dilatable, so as to admit the instrument well into it before the tubes force it open. By this the tense band of the stricture outside of the mucous membrane is forcibly torn across, while that membrane, as a general rule, remains uninjured. A full-sized sound may now be used to explore the urethra, but no force should be used to pass it into the bladder. In a few days, according to the urethritis, or general disturbance of the system, a small sound may be passed into the bladder, and then one of large size. No catheter should be tied into the bladder after the operation, except in rare cases.

A modification of this instrument by Prof. Van Buren is very important. A piece is fitted upon the point and perforated continuous with a groove above on the curve. This allows it to be slid down upon a fine whalebone bougie, previously inserted into the bladder, which acts as a guide to the instrument. But a still better method, invented by a French surgical instrument maker in Paris, is that of having the filiform bougie fastened to a metallic tip, which is screwed upon the end of the instrument after the bougie is passed through the stricture. This guides the instrument through, and becomes curled up in the bladder, to be withdrawn with the instrument. With these improvements Holt's dilator can be used in quite tight strictures; or any stricture that can be passed by a filiform bougie may be dilated sufficiently to admit the instrument with the guide and ruptured.

Internal urethrotomy, or internal incision, is performed by an instrument containing one or more concealed triangular blades, which are forced out at the convexity, as in Maisonnenne & Boillemier's instrument, or at the concavity, as in Civiale's, or at the sides. It cuts through the urethra and dense tissue of the stricture, the two latter instruments cutting as they are withdrawn. The after treatment is similar to that in rupture.

External and perineal urethrotomy consists in cutting down upon the stricture from the external surface of the penis or perineum.

When the section is made upon a staff as a guide it is called Syme's operation, or perineal division. All others are called perineal sections, and external urethrotomy. It is adapted to bad resilient strictures, which, however, may be opened by internal urethrotomy; also, to those found to be impassable, with retention of urine, especially those of traumatic origin. In cases of infiltration of urine, and where there is urinary fistula, one or more section should be performed. The stricture may be so close that even a filiform bougie cannot be passed, not even a fine probe, after the perineum is opened. In others, the filiform bougie may be passed, and in others a grooved sound may be passed. In either case the patient is tied up, as in the operation for lithotomy, after being anæsthetized. If a staff or bougie has been passed it simplifies the operation much. An incision is made in the median line of the perineum, beginning just in front of the anus, cutting forward an inch, or inch and a half, with the edge of the knife, toward the scrotum. The incision is deepened until the groove in the staff or bougie is reached; the scalpel is then passed beyond the stricture, and it is divided from behind, forward. When no guide can be passed through the stricture the surgeon must introduce a catheter, or grooved sound down to it, and cut down upon that. He must then try to pass a fine silver grooved director or probe, and cut upon it; if that cannot be done he must depend upon his anatomical knowledge, and cut carefully back toward the prostate gland, or he may pass his bistoury, with edge forward, directly in toward the prostate gland at first, and endeavor to cut the urethra behind the stricture, and then cut forward to the end of the sound. When there are no fistulæ for the urine to escape through, and there is complete closure, the retained urine will have formed the dilated urethra into a sac behind the stricture, which is pushed forward by the contraction of the distended bladder, and may be reached more easily, as occurred in a case of this kind in which I operated, than if this were not the case. If there be fistulæ and an indurated condition of the perineum, with an impermeable stricture, it becomes very difficult to find the urethra behind the stricture, and even the best surgeons have been foiled in the attempt. By carefully dissecting backward in the proper direction, with a finger in the bowel, to prevent a wounding of that organ, the urethra may usually be found and the stricture opened. The old method of tying a catheter into the bladder, or a tube into the opening, is now laid aside as useless, as complicating the case. The urine passes at first through the wound,

but soon finds its way through the natural channel, and the wound closes up. A catheter should be introduced after a few days, and, afterward, occasionally a sound. After the stricture is opened, by either of these methods of rupture or incision, it must not be considered cured, but the patient must be kept under observation for awhile, and instructed how to use a sound, which should occasionally be passed into the bladder, to prevent any possible contraction of the urethra at the point of stricture.

The following report of a difficult and complicated case may be interesting to many, and may also serve to direct some one as to what he may do, when placed under similar circumstances.

Mr. T., aged about thirty-eight came to me, December 16th, 1870, suffering from a stricture, which was so close, that, for a long time he had not been able completely to empty his bladder. The overflow simply would pass after much straining, and thus would give him only temporary relief. The stricture was the result of gonorrhœa, and had lasted at least ten years. He followed the sea, and in different countries had consulted various eminent surgeons. There had been complete suppression of urine more than once. Although the attempt had been made many times, to pass an instrument of some kind into the bladder, it was only accomplished once, and then while under the influence of chloroform. He had suffered also much from chills, which he thought were often brought on by the suffering and depression produced by his disease. I found the stricture located in the anterior part of the membranous portion of the urethra, just behind the bulb. It was apparently about a third of an inch in length. After carefully manipulating, I succeeded in passing the finest whalebone filiform bougie, one-third of a size of the No. 1, French scale. After withdrawing it, he was able for the first time in a long period to evacuate his bladder. The next day, I passed the same, and one a third larger, after working some time with him. In two days I succeeded in passing the third size of the whalebone filiform bougie. Proceeding cautiously, every two or three days, I at last succeeded in passing Nos. 1, 2, 3, 4 and 5, French scale, acorn points. Afterward, at another meeting, I could not pass either, and could only succeed in passing the smallest filiform. In the meantime, he had been taking of ℞. Fluid extract gelseminum semp. ℥ ss; fluid extract agrimonia, ℥ ijss. M. A tea-spoonful every four hours. He had also been drinking freely of a tea of ℞. Althae off. rad, ℥ ij; althae off. fol., ℥ ij; uva ursi fol., ℥ ij; barosma cren. fol., ℥ iss. One fifth was added to two pints of water; it was steeped to a pint and drank freely.

After much perseverance, I was at last able to introduce a No. 4 again, and this I followed with a small No. 1, acorn-pointed, English bougie, which I had had Mr. Tieman insert into a tip, to be screwed on to the extremity of a Holt's dilator. The ordinary guide being sharp pointed, I was unable to get it in, because of the position of the stricture, and of its catching at the border of the stricture; and being very flexible, it could not be manipulated through. I succeeded with this, and, having attached the instrument, it was guided down through the stricture, and I then ruptured it in the ordinary way. On withdrawing the instrument, I found that the guide, a full length No. 1 bougie, had pulled out of the tip and was left in the bladder. I immediately searched for it with a pair of long narrow-bladed forceps, and found it was not in the urethra. I called on Mr. Tieman, and he had no curved forceps made sufficient for the emergency. By this time the urethra was too much inflamed and swollen from the operation to allow of much interference; and it is doubtful if so soft a material could be felt if it had been possible to get an instrument to search for it. Resort was then had to poultices of hops and flaxseed for the purpose of preventing any excessive inflammation of the bladder. Perfect rest upon his back was enjoined, and every measure possible was adopted to subdue the inflammation in the urethra. In about five days, I passed a No. 7 bougie, and in two more, a Burges forceps, which, when closed, is about like a No. 7 steel sound, but opens like a pair of forceps, the hinge being in the entire length of the shaft. I searched the bladder carefully in all directions, but, owing to the soft nature of the object looked for, and the grasping of the instrument by the still inflamed urethra, I could not detect it. There was much bleeding of the urethra and I desisted, and renewed the attempt two or three days after but with no better success. No inflammation of consequence had arisen in the bladder, and so there seemed to be but two courses to pursue for the ultimate relief of the patient, and to prevent grave consequences: 1st. To see what would occur in the natural way, as it was possible for the bougie to soften and come away. (The instrument makers assured me that the gum and wax would soon dissolve.) 2d. To operate as for lithotomy immediately, and remove it. I decided that the latter could be done at any future time, if I failed in the other way, and I gave him the benefit of the chance. I put a bougie of the same kind and size into warm urine and kept it there. I soon found that it uncoiled itself, and let the catgut which is in its interior

out, and was inclined to break up into pieces, while the catgut softened and became separated into filaments. The hard portion of the bougie would not dissolve. The point of the bougie now presented itself in the urethra, and was at last expelled, creating much irritation. Small shreds of catgut occasionally passed. I increased the size of the bougies until a No. 10 was inserted, and kept him drinking freely of demulcent teas and using the poultice. By keeping the urethra well dilated, piece after piece of the bougie became engaged in the urethra, sometimes remaining a day or two before I would see him. I would then extract them or loosen them, and have him retain his urine until the bladder was fully distended, and the force of the current would wash them out. Some pieces were completely coated with phosphate of lime, and studded with beads of this deposit as large as buckshot from one end to another. I have one piece two inches long. I washed the bladder out with a double acting catheter with a liquid of acidi nitrici, ʒ ss; aqua, ℥j. In a short time the rest of it passed, and a large quantity or the whole of the calculous deposit. The inflammation in the urethra now rapidly subsided. A large sized bougie was occasionally passed, and he urinated with a large stream without pain or inconvenience. From the broken down condition of his system and the deranged condition of the bladder, there was a constant tendency to alkalinity of urine, and a short time ago he came to me complaining that gas escaped from the bladder in bubbles and spurts, after he had finished urinating. I administered dilute nitric acid internally, ten drops three times a day, and washed out the bladder with the same, highly diluted, and the trouble disappeared. I also gave him quinine and iron internally. He inserts now a steel sound, No. 11, once a month, until the parts are sound and well.

I have suggested to Mr. Tieman that a fine silk cord, made of the finest single strand of silk, twisted and doubled, be firmly attached to the guide of every dilating instrument sold, close to the screw tip (and this can be done by the surgeon) for the purpose of drawing it out of the bladder immediately, should an accident happen. It can be applied so as not to interfere with its passage through the stricture, and may save much trouble. He has since advised it to those buying them. A brother of the gentleman whose case I have just described was afflicted with a stricture in the same portion of the urethra, but not nearly as bad a case as the other. The stricture was very close, and he could pass but a small stream of water. I introduced the fili-

form bougie, and then No. 1 and 2, and followed with the guide with the cord attached. This took the dilator through, and I ruptured it one week ago. The inflammation has nearly subsided. I have introduced a No 9. bougie, and will soon introduce as large a size as the urethra will pass, and then he will be allowed to use it occasionally, until the parts are sound and well.

NEW YORK, *January* 16*th*, 1871.

SUCCESSFUL TREATMENT OF STRICTURE.—A CASE IN PRACTICE.

By H. E. Finkle, M. D.

The patient was a German, married, and in his seventieth year. He had been troubled for two years with difficult micturition, which had finally resulted in a stricture of the urethra, just in front of the prostate gland; there was an entire suppression of the flow of urine, which had continued eighteen hours, when I made my first visit. I immediately administered an emetic of lobelia, in infusion, in the hope that it would relax the tension of the whole system, and so remove the difficulty without requiring further medication or the use of the catheter, but in this I was disappointed. Two hours afterward the instrument was introduced and about three pints of urine obtained.

Perceiving what I had to deal with I now resolved upon a thorough course of treatment. For an alterative I prescribed two grains of podophyllin daily, for three successive days, and subsequently for only every third day. I also administered the following febrifuge:

℞.	Lobeliæ Inflatæ,	ʒ iv.
	Veratri Viridis,	
	Cypripedii Pubescentis,	*aa* ʒ j.

Dose, one or two grains every two hours.

For a diuretic I administered two grains of the gum of the *pinus canadensis* every eight hours, also an infusion of cleavers, buchu and slippery elm. Hot fomentations were applied, and enemas administered of lobelia and bayberry bark.

This treatment was continued for a week, the catheter being employed twice a day. The patient was now convalescent, except in the matter of the stricture. The treatment was changed, and oil of erigeron given, in doses of three to five drops, every two hours; also doses of hydrastis, to improve digestion and relieve irritation of the mucous membranes. The podophyllin and febrifuge powders were continued, as at first.

At the end of the second week I resolved upon local treatment, and prepared the following infusion:

℞.	Lobelia Inflatæ foliarum,	grs. j.
	Hydrastis Canadensis Rad.,	grs. ij.
	Aquæ Bullientis	q. s.

I injected twice daily into the urethra before introducing the catheter. Balsam of copaiba was administered three to five drops every two hours; also, the patient was directed to drink freely of flaxseed tea. The first endeavors at injection were not very successful, but perseverance overcame the obstacles, and the patient was discharged at the end of the third week, cured.

I regard the success in this case to be due entirely to the local application of lobelia and hydrastis. Neither the febrifuge powder. the fomentations nor enemas were of special service, and the catheter was of no service in removing the stricture.

CYSTITIS.

By J. M. Comins, M. D.

There are few diseases that are as prevalent among the afflicted of our race, and treated with as little success, as uro-cystitis, or inflammation of the bladder and its contiguous organs. In this disease inflammation most frequently commences in the mucous coat of the bladder, to which it may be limited, and present any degree of activity from the most acute, to the most chronic form, according to the age of the patient, habits of life, diathesis of constitution, etc., or it may involve the parietes, by ulceration and be transferred to the adjacent organs, the kidneys, prostate gland, or both, and then it becomes exceedingly dangerous and fatal.

In the acute form of the disease, there is a severe pain and tenderness in the hypogastric region, a sense of heat, and pricking on pressure over the bladder when it contains urine, frequent and urgent calls to micturate, attended by great difficulty and distress. The urine is passed in small quantities, is generally acid in its chemical reaction early in the disease, becoming neutral or alkaline, as the disease advances, is of a deep lemon or orange color; when first voided it may be clear, soon becoming turbid and of various hues, fetid, ammoniacal, and on cooling, numerous shreds of lymph or mucosine are seen floating or deposited in quantity at the bottom, containing much sedimentary matter, phosphates, urates, blood-corpuscles, epithelial scales and often pus. This state of the urine arises from three important pathological conditions: First, from vital depressions, manifested chiefly by nervous debility and nervous irritability. Second, from injuries of the spinal cord or its membranes; affecting the urine by first deranging the functions, and finally the structure of these organs. Third, from disease of the urinary organs themselves. Cystitis frequently occurs in cold and humid climates, especially that form of it which is limited to the mucous coat, and it is common in those persons who use fermented or spirituous liquors to excess. Sedentary habits especially in the aged, predispose to it. Habitual neglect to attend the desire of voiding the urine, also is an irritating

cause. Few causes, perhaps, which more frequently predispose to inflammation of the bladder, than long neglected disorder of the digestive organs, and especially to those states of cystitis which are complicated with calculous formations. The complications are usually gonorrhœa, gleet, stricture of the urethra, syphilis, calculus in the kidneys or bladder, rheumatism, gout, etc., inflammation of the rectum or of the uterine organs, frequently involve the bladder. *When the urine containing pus presents an acid reaction, we are generally sure of pyelitis; when alkaline, cystitis is the disease.*

Purulent urine becomes clear on standing, a sediment is thrown down, the supernatant liquid is often of a greenish yellow tint, and contains albumen, which readily responds to the acid tests, if not to heat.

The post-mortem appearance differs some in different cases, but usually the inner surface of the bladder is thick, rough, of a reddish pink hue, from capillary distention and congestion, with small ecchymoses, owing to exudations from the diseased capillaries; coagulable lymph is found covering the mucous coat; this tunic may be detached from the muscular in parts or throughout forming a grayish layer resembling a false membrane. The parietes of the viscus are thickened and contracted, the muscular coat greatly hypertrophied, and the ulceration of the mucous coat penetrates to the muscular, or even to the peritoneal. In more severe cases, the muscular coat being involved in inflammation, gangrenous spots exist. One or other of the kidneys is generally involved, and the pelvis of that organ ulcerated; the ureters ulcerated at their vesical extremity.

POISONING FROM DEAD ANIMALS.

REPORTED AT THE ANNUAL MEETING OF THE ECLECTIC MEDICAL SOCIETY OF THE STATE OF NEW YORK, JANUARY, 1871.

BY A. W. RUSSELL, M. D.

This report is made with the two-fold purpose to elicit discussion, in the hope that whatever errors occurred in the treatment may be brought to light; and, secondly, that those practitioners who are familiar with cases of the class here described may be called out and induced to present us with a mode of treating them better and more successfully. It is due to myself to remark that, although I have been engaged in the practice of medicine for almost thirty years, I was never before called upon to prescribe in a like instance.

Charles Ostrander, of Greenbush, Rensselaer county, by occupation a farmer, died August 26th, 1868, from the effects of virus absorbed into his system while taking the skin off a cow, dead from a malignant disease then prevalent. I was his medical adviser, and gave him the best care and attention in my power, without the encouragement of success. I propose now to give a full statement of the case and treatment.

It so happened, while I was attending him, a similar case occurred, which terminated fatally within a briefer period. Mr. Smith, a near neighbor of Mr. Ostrander, while milking his cows one Sabbath evening, observed one of them very sick; she died in about twenty minutes. Mr. Smith was desirous to ascertain the cause of so sudden a death, and proceeded without delay to the examination of the stomach of the animal. In doing this he accidentally inflicted a severe wound on his left hand with the large butcher's knife which he was using; unfavorable symptoms followed, and the next day he placed himself under treatment at the Albany hospital. He remained there three days only. He failed rapidly all the time and was removed home on Thursday morning.

On the evening of that day I was requested to see him. I found him upon a lounge. The left arm was highly inflamed and swollen. He experienced no pain in it, but complained of "a great weight and aching" through his whole system. I considered him to be beyond helping, and merely made a prescription to alleviate the suffering.

On Friday the whole arm, shoulder and side of the body were involved, and the œdema extended nearly across the breast to the right shoulder. On Saturday the right shoulder and arm had also become swollen like the other when I was first called, while the parts originally affected were more inflamed than ever, and were covered with numerous spots of gangrene. It was apparent to all that he was rapidly failing, both physically and mentally. He died on the ensuing morning, death having done it work in less than one week.

My treatment consisted in the use of stimulants, tonics, and antiseptics.

Mr. Ostrander's case I am able to present more fully. It was about the same period with the other, and I visited both at one time.

Thursday, July 30, 1868, the weather being intensely hot, Mr. Ostrander performed the work of skinning the dead cow that he had lost from cattle disease, with both arms bared. He allowed the hide, as he was removing it, to lie over the left arm; and when he had finished, he observed a peculiar appearance of the surface; it had become, to use his own expression, "parboiled." He apprehended no trouble from it, however, although, having lost several animals previously from the same disease, several of his neighbors had warned him of the danger that he was incurring. He was actively engaged in the milk business, and for two or three days thought the matter required no attention.

But there had been several places on his arm at the time referred to which had been abraded for two or three days. He noticed a peculiar sensation there, which he attributed to a cold contracted from working in the water and getting wet, and considered it not necessary to ask surgical advice.

August 7.—On rising in the morning Mr. Ostrander observed that the arm was slightly swollen, and an inflammation around the spots where the skin had been abraded. He immediately waited upon his family physician in Albany, and also visited several other practitioners. They all answered him that there was no danger of serious results. For a little while his anxiety was somewhat relieved.

About three o'clock the same afternoon, observing that the arm

seemed to be growing worse, he visited me for advice. I made a careful examination of the case, with all the symptoms and circumstances, and at once perceived that it was a case of poisoning by absorption. I apprised him of this, and lost no time in giving him full directions for taking care of himself, as well as the necessary medicines to be used till the next day. If the symptoms then had not decidedly improved I was to be sent for without delay.

August 8.—Friday morning came, and a messenger informed me that Mr. Ostrander felt better, but desired to see me at his house. He was comfortable, but there was no real improvement of the symptoms. The swelling and inflammation in the arm had not diminished, although he had, conformably to directions, used freely upon it the tincture of veratrum viride, and taken moderate cathartics, relaxants and mild stimulants internally. It was clear that the case was one of no ordinary moment. One week (nine days) had passed since the inoculation, and a plan of action must be adopted at once and to the point.

The first thing to be done was to prevent, as far as possible, the further dissemination of the poison through the body; the next object was to eliminate and neutralize what had been already diffused, and to obviate extensive mortification and sloughing of the arm and hand, of which there was great likelihood. It was especially requisite to sustain the strength of the patient, so that he might not be exhausted by the suffering and other untoward conditions incident to the ulcerative process. I directed my treatment accordingly to accomplish these indications.

From the second or third day afterward charcoal and manganese, pulverized, were administered freely every two hours, generally in brandy or whiskey. About the fifth day the arm and hand were swollen so that the skin seemed likely to burst. In order to enable the poisonous matter to escape as speedily as possible four or five longitudinal incisions were made from the elbow to the hand, taking great care not to wound the muscular tissue.

The swelling and inflammation continued steadily to increase. The eighth day it had reached the shoulder and side. On the ninth the arm was enormously swollen and painful. On the tenth a soft tumefaction appeared on the elbow; it was opened, and discharged about a gill in quantity of yellowish fluid. This discharge, and free application of the tincture of veratrum viride to the side and shoulder, seemed to reduce the swelling and inflammation, and on the eleventh

day the upper part of the arm above the elbow was again at its natural size. On the twelfth day all the symptoms seemed to be greatly improved.

For about a week the patient continued to rally; his strength increased; his appetite was good; the bowels and kidneys regular, and sleep but slightly disturbed; yet he continued to be somewhat nervous; the arm remained swollen, and a tendency to gangrene gradually increased, from day to day, as was evidenced by the general appearance and steady losing of sensation. Two points had apparently been accomplished, as I had sought, the prevention of further dissemination of the poisonous virus, and the neutralizing of what had been already absorbed. We had also succeeded very well for several days in our endeavor to sustain the strength during the ulcerative process in the forearm and hand. Then, however, mortification and sloughing became extensive. The fetor was almost unendurable. The patient's strength now failed rapidly. Œdema of the feet and legs, with pock-like eruptions upon them, showed unequivocally that life was assailed at its citadel and poisoned at its fountains. The absorption from the arm was decomposing the blood all through the body, and death was rapidly hastening.

The treatment consisted of tonics, stimulants, antiseptics and nervines. For the first I employed Peruvian bark and hydrastis canadensis. The stimulants were brandy, whiskey, ammonia and capsicum; and the antiseptics, yeast and charcoal, very freely used, baptisia, etc. External applications were almost continually made, and other remedies for the fever and other incidental symptoms were used as the case indicated.

The death of Mr. Ostrander took place on the 25th day of August, twenty-seven days after the first absorption of the deadly virus.

ALBANY, N. Y.

METALLIC PARALYSIS.

By Miss Anna T. Nivison, M. D.

Early in the summer of 1870, Mr. W. of this place, asked our consideration of the case of his son, a young man of about thirty years of age, who had exhibited symptoms of a peculiar nature. The phenomena, which were especially noticed, were double vision, dropsy of the eyelids, often with utter inability to keep them open, want of power to move the limbs and great debility. The strength was steadily becoming less from day to day.

Several weeks afterward the patient presented himself. When I first saw him his movements were like those of a blind man. He carried a staff, was led along, and seemed to grope his way. In stepping, he first planted his heel and then the entire foot came down with a sort of thud, as if it was dropped on the ground. His eyelids dropped, almost covering the balls of the eyes, so that he was obliged to lift up his chin and lower part of the face to enable him to discern objects.

Upon being questioned, he stated that he had served in the army during the late civil war, but was in good health when mustered out. He had, almost six months previous, noticed a singular affection of his eyes, that he saw objects double. This continued about two months, when other symptoms were also perceived, which excited alarm. He found his strength giving way; there was weakness in all the joints, and much inability to move the limbs. Sometimes when walking in the street he found great difficulty in placing one foot before the other, and if he was much fatigued he often failed entirely in the endeavor to walk. He noticed also, pains occasionally in the back, over the region of the kidneys. In other respects he had considered his health as not impaired. He had been under the care of several physicians, and undergone several modes of treatment. An oculist of repute, had also examined him and prescribed for his eyes, but without success. He had derived no apparent benefit from any of his medical advisers, none of whom divined the cause and specific nature of his trouble. They pronounced it paralysis, and

prescribed accordingly, but their investigation reached no farther. About four months had been spent in this way.

My first inquiries were directed to his habits and pursuits. I learned that he had been employed at the manufactory of mowing and reaping machines in the city of Auburn. It was his department to prepare the metallic composition used in the construction of certain parts of the implements. Lead, antimony and tin were the ingredients of this composition. I immediately remarked that I had perceived the cause and specific character of his ailment. It was paralysis, induced by poisoning, from inhaling and absorbing noxious metallic vapor.

He came under treatment here a short time afterward. We began with warm baths, of the temperature of 90° to 95° Fahrenheit; accompanying their administration with the use of the electric battery. The internal medication was directed to the promoting of the action of the skin, liver and kidneys, in fact of the entire glandular system. Podophyllin in large doses, leptandrin, fluid extract of taraxacum, acetate of potassa and sweet spirits of nitre were used in turn for this purpose. Occasionally the baths were omitted for a week, and the application made instead, of the *leibenschwiker and oleum baunscheidti*, to the surface of the body, chiefly over the region of the spine and upon the limbs.

After the first few days of treatment, there was noticed a peculiar odor, rank and very offensive. Purple spots also would appear on the face and body, which would vanish after a few minutes. There presently began to manifest indications of improvement. His skin became more clear, the eyelids were more natural, the strength increased, and the control and power over the muscles were more marked. The double vision troubled him less, and after the lapse of three months ceased entirely. His eyes became fully restored; his health otherwise was good, and in December he left, to return to his family, the unfavorable symptoms entirely removed.

A journal was kept of the case, and the treatment from day to day was carefully noted, with the results; but as this was governed directly by the symptoms as they were manifest at specific periods, it has been considered sufficient to give a general view of the case and its treatment, instead of an extended diary. It certainly was very gratifying to make a successful diagnosis and cure of a patient where able practitioners had employed their skill in vain.

DRYDEN, *January*, 1871.

MENORRHAGIA.

By J. Morrison, M. D., M. A.,
Member of the College of Physicians and Surgeons, Ont., Honorary Member of the Eclectic Medical Society of the City of New York.

The term *menorrhagia* is used to designate an excessive flow of blood at the menstrual period, which may occur regularly or too frequently; while *metrorrhagia*, which literally means a hemorrhage from the uterus, is a term employed to designate any sanguineous discharge which occurs in the interval between the menstrual periods, and is wholly unconnected with the catamenial discharge. Menorrhagia may occur in opposite conditions of the system. It occurs in the plethoric, or those in whom the vascular system is redundant with red blood-cells. It also occurs very frequently in the anæmic and debilitated, in whom there is a tendency to chronic engorgement of the uterus. In the plethoric, the excessive stimulation of the brain and heart, caused by the red globules, very frequently gives rise to vertigo, palpitation of the heart, syncope, and in some cases to hysteria. The same symptoms will also appear in the anæmic and debilitated, because the brain and heart do not receive their proper stimulus, owing to a deficiency of the red globules. In such cases there is always an atonic state of the vascular system, and especially of the uterine vessels, as well as an increased fluidity of the blood, due to hypnosis. Such extensive drains on the system, if permitted to continue, are very apt to terminate in general nervousness, chlorosis, and dropsical effusions, especially if they occur during lactation.

Women, however, do not menstruate during lactation, as a general rule, but when menorrhagia occurs during that period, the excessive drain on the system is sure to produce serious disturbance in the nervous system and permanent impairment of the general health.

Congestion, or soft engorgement of the uterus, is often present with menorrhagia in anæmic women who have borne children. In such cases there is, for some time preceding the attack, irregularity of the menses, as to time and quantity, and occasionally there is uterine leucorrhœa. The menorrhagia does not relieve the congested vessels

of the uterus, as one would be led to suppose; for the want of tonicity and contractility in the muscular structure of the uterus and in its blood vessels deranges the circulation of the organ and maintains them in a state of engorgement, which is not materially lessened by the sanguineous discharge per vaginam. This form of engorgement occurs very frequently at the period of the final cessation of the menses, and is attended with sanguineous discharges more or less profuse. Periodical discharges of blood may occur independently of the menstrual function, owing to the presence of polypi, sub-mucous fibrous tumor or carcinoma uteri. In every case it is generally best to examine carefully the pelvis and its contents by means of palpation, touch, the speculum uteri and the uterine probe. A correct diagnosis cannot always be made without resorting to these means. The prognosis is generally favorable, but this will depend much on the cause of the affection. When the discharge is not checked at the proper time it sometimes results in sterility, hysteria, dyspepsia, extreme emaciation or chlorosis.

Treatment.—This is palliative and curative. In mild cases the patient should be kept in a cool, quiet place, and lying on the back. Cold should be applied to the vulva, and some mild hæmastatic, as aromatic sulphuric acid or the oils of erigeron and cinnamon, given internally. Enemata of cold water are very effectual in mild cases. The tincture of Indian hemp also has proved very beneficial in this disease. In plethoric cases mild depletion, by means of saline cathartics, together with the free use of hæmastatics and uterine tonics, will be necessary to effect a cure. The patient should take abundant out-door exercise, abstain from the use of wine, ale, and all other stimulants; and, if married, sexual intercourse should be strictly prohibited.

As a hæmostatic in this disease iron and alum, either alone or in combination with other appropriate remedies, will generally arrest the hemorrhage promptly in all cases. The following formula has proved very successful:

℞. Ferri et Aluminis Sulphatis,
Secalis Cornuti, *aa.*, gr. xx.
Opii, gr. vi.
Ipecacuanhæ, gr. ii.

Misce et tere simul, et divide in quatuor pulveres. Dose, one every half hour or every hour, according to its effect.

Warren's styptic balsam has also proved useful in arresting the

flow. The oils of cinnamon and erigeron may be given for the same purpose. Vaginal injections of a solution of persulphate of iron may also be tried in severe cases, but in no case should injections into the cavity of the uterus be tried. In many cases the injected liquid, as well as the retained menstrual discharge, in the case of an imperforate hymen, has passed up through the Fallopian tubes into the abdomen and produced peritonitis, which terminated in death. In debilitated and anæmic patients the blood must be improved by the free administration of vegetable and mineral tonics, such as the various salts of iron, the mineral acids, quinia, hydrastin, etc. I have found the following formula excellent in such cases:

℞.	Quiniæ Sulphatis,	℈j.
	Acidi Sulphurici Aro.,	℥ss.
	Acidi Chlorid. Nitric Dil.,	℥j.
	Aquæ Puræ,	℥ijss.

Misce. Sig.—Dose, one tea-spoonful in a wine-glass full of water, three times daily.

With a view to producing contraction of the uterus, and imparting tonicity to its parenchymatous structure, in the case of enlargement or soft engorgement of that organ, ergot and nux vomica have proved admirable remedies.

℞.	Vini Secalis Cornuti,	℥ii.
	Tinct. Nucis Vomicæ,	ʒii.
	Acidi Sulphurici Arom.,	ʒii.
	Syrupi Aurantii Corticis,	℥iiss.

Misce. Sig.—Take one or two tea-spoonsful two or three times a day.

As an auxiliary to the ergot two or three pints of cold water should be injected into the vagina night and morning. The bowels should be kept open by some mild laxative. Rest may be procured by an opiate, or, better still, by hysocyamin and cypripedin.

Toronto, Ont., *July* 1870.

DYSMENORRHŒA.

A PAPER READ BEFORE THE ECLECTIC MEDICAL SOCIETY OF THE THIRTY-SECOND SENATORIAL DISTRICT, AT THE ANNUAL MEETING AT DUNKIRK, JANUARY 3D, 1871.

BY A. P. PARSONS, M. D., FORESTVILLE, CHAUTAUQUA COUNTY.

By the term *dysmenorrhœa*, we understand painful or difficult menstruation, the catamenia being discharged, attended by much suffering from pain in the loins, back and limbs, or other constitutional disturbance. The normal catamenial flow is substantially identical with the venous blood. When taken directly from the uterus, it will coagulate; but if it is allowed to mix with the acid mucus, which is the peculiar secretion of the vagina, this phenomena is rarely witnessed.

Cazeaux mentions that certain females discharge by the vulva, at the menstrual period, a kind of membranous bag, which would seem by its form to have been moulded upon the uterine cavity, and which bears a strong resemblance to the membranous pouch or deciduous membrane, which is expelled with the ovum in cases of abortion. The nature of the pouch is, in fact, the same in both cases, being formed of cellular tissue, which is both vascular and glandular; its internal surface is always smooth, provided with epithelium, and often abundantly perforated with glandular orifices. The external surface by which it adhered to the organ from which it was separated, is shaggy and torn. It is evidently an exfoliated portion of the mucous membrane. This exfoliation occurs annually in such women only, as are afflicted with difficult or very profuse menstruation, accompanied with violent pain, membranous dysmenorrhœa; and according to M. Coste, is the result of an excessive congestion, a sort of apoplexy of the mucous membrane, for clots are almost always found infiltrated in the substance of the expelled membrane. Cazeaux thinks it probable that this exaggerated congestion, in some cases at

least, may have been the consequence of an abortive conception, or perhaps of solitary venereal excitements.

In dysmenorrhœa, as here set forth, the fibrine has not been changed by the action of the acid or vaginal secretion, owing to the rapid flow, and hence the blood does not coagulate. There exists a subacute inflammation in the interior of the uterus, and also a local congestion, as just stated, at each period; and if there is not a ready exit, it will result in severe inflammation and pain. It is supposed that the blood-vessels which communicate with the cavity of the womb, are provided with valves; also that there is a peculiar secretion expelled with the blood. My object in alluding to these physiological theories, is only to be enabled to elucidate more clearly my plan of treating this disorder.

The physician is seldom called in a case of dysmenorrhœa, till the acute symptoms have presented themselves. I have found the most prompt relief afforded by administering a decoction of white root and wild cherry, as follows:

℞. Asclepiæ Tuberosæ.
Pruni Virg., *aa*, ʒ iv.
Aquæ Bullientis, pt. j.

Give in draughts of half a tea-spoonful hot, every half hour till free perspiration is induced. When the stomach is too sensitive for these agents, or they cannot be procured, the fluid extracts may be substituted as follows:

℞. Ascl. Tub. Fluid Ext.
Pruni Virg. Fluid Ext.
Anem. Pulsatillæ, Fluid Ext., *aa*, ℥ ss,
Syrupi Simplicis, ℥ sesq,
Kalii Ferrocyanidi, ʒ ij.

Mix and give a tea-spoonful every half hour or hour as the case may require, till the pain begins to subside; then administer at intervals of two hours, till the pain ceases and the flow becomes easy. By no means, let the usual warm fomentations to the abdomen, back and feet be neglected.

The lactuca sativa or garden lettuce, used with the asclepias, in half-ounce doses, is an excellent prescription. The collinsonia or stone-root is almost as good, but is apt to disagree with the stomach. The most prompt relief is given by injecting into the womb a little warm water. It acts like magic; I think because it attenuates the

thick tenacious secretion, relaxing the contracted orifices of the blood vessels, and enabling the retained fluid to escape. The cause of the trouble being removed, nature will complete the work, and the patient will generally sink into quiet sleep.

Out of twenty-seven cases, under my treatment within a specified time, three required the second and four the third injection. These last were of a full habit, with dark complexion and sluggish circulation. The active and nervous are the most promptly relieved.

When the local treatment can be employed, little medicine is required; many, however, are not willing to receive local treatment from a male physician. A valuable auxiliary for this purpose may be found in the vagina-injector, invented by Dr. G. W. King of Saratoga Springs. The instrument may be filled partly full with warm water; then introduce it, and hold it in such a manner as to keep the water in contact with the mouth of the womb. The water should be changed in ten or fifteen minutes. All this can be done by the patient herself or by the nurse. In chronic cases, the injector gives better satisfaction than anything else of the kind in the market.

In the chronic form of dysmenorrhœa, diligent inquiry should be made to ascertain the habits of the patient and the general condition of her system. All agree that the mental and personal habits have at all times a marked influence; and whatever produces a depressing influence on the mind or has a tendency to lessen the vitality should be carefully avoided, and the effect counteracted.

When the blood is thick and carbonaceous and the circulation sluggish, medicine should be given during the interval, at least for two weeks previous to the menstrual period, for the purpose of attenuating the blood and secretions. The following formula is good:

℞. Stillingiæ Sylv., fl. ext.
Pruni Virg., fl. ext.
Corydalis Form., *aa* ℥ ij.
Kali Bromidi, ʒ j.

Dissolve the bromide of potassium in two ounces of water and add the other ingredients. Dose, a tea-spoonful three times a day.

The bowels and kidneys should be kept active, and an alkaline sponge bath taken every second night, rubbing the body vigorously with a flesh brush or crash towel, to procure reaction to the surface. Highly seasoned or carbonaceous food should only be eaten in small quantities, but a plain diet, with vegetable acids in small quantities is important.

If the patient is anæmic and debilitated, then tonics will be required, and remedies to enhance the vital force, with a wholesome and generous diet and carbonaceous food. Wine or porter will be valuable auxiliaries, taken at meal time, in such quantities as the case will admit. The following formula is excellent for a tonic medicine:

℞.	Salicis Albæ, fl. ext.,	℥ ij.
	Pteleæ Trifoliatæ, fl. ext.,	j.
	Chelonæ Glabræ, fl. ext.,	
	Senicionis Aurei, fl. ext., *aa*	ʒ j.
	Frumenti Spiritus,	ʒ iij.
	Lauri Cinnamoni Essent.,	gtt. lxxx.

Mix. Dose, a tea-spoonful four times a day. A sponge bath should be taken every second night; using a quart of water to which has been added a pint of alcohol and half an ounce of ground mustard; or, moisten the surface by means of a sponge dipped in this mixture, from three to seven times a week, but use no friction after making the application. The condition of vitality being low, heat-producing food should be taken, together with articles abounding with nitrogen and flesh-nourishing elements; otherwise, we may observe the patient rapidly losing flesh and strength, eating heartily every day and yet actually starving.

In most cases of dysmenorrhœa are pain, heat and weakness in the region of the spine. For this I have often found the following formula serviceable:

℞.	Strychni Nucis Vom., tinct.,	ʒ ij.
	Polygoni Punctati, tinct.,	ʒ ii.
	Capsici, tinct.,	
	Anemones puls., fl. ext., *aa*	ʒ j.
	Natrii Chloridi,	ʒ ij.
	Vini Spiritus,	ʒ ij.
	Quiniæ Sulphatis,	ʒ ij.

Mix thoroughly and apply to the spine once or twice a day, as the case may require. Whenever the pain is severe, the applications should be made as often as every two or three hours, placing over it a cloth wet with a solution of common salt, as warm as can be borne.

The kidneys and bowels should be kept duly active the week previous to the recurrence of the catamenial period; and those using the vagina-injector once or twice a day, fifteen or twenty minutes at a time, during that week, are sure to be benefited.

Careful attention to the treatment prescribed, when the general health is good, perhaps repeating it three or four times, will entirely cure this complaint, without the need of remedies for the whole system. But when there is general debility and local organic disease the patient must be treated as the symptoms indicate and the condition of the body require; being careful, however, not to lose sight of the original cause, which may, indeed, appear to be a secondary matter. An error of this character will result is disappointment. Leucorrhœa, ulceration of the vagina or os uteri, ovarian disease, general debility, dropsy, and consumption, are developed by neglect or erroneous treatment of dysmenorrhœa. The function of which this ailment is a disturbance, is vital to the whole economy of the female body, and its disorder is fruitful of woes.

CASE OF SUPPRESSED LOCHIÆ.

REMARKS ON THE THEORY AND PRACTICE OF MEDICINE. READ AT THE ANNUAL MEETING OF THE ECLECTIC MEDICAL SOCIETY OF THE STATE OF NEW YORK, JANUARY 25TH 1871.

By Mrs. M. B. Hayden, M. D., No. 64 Irving Place, New York City.

The press has teemed for a long period of time with voluminous disquisitions on the theory and practice of medicine, yet the topic seems inexhaustible, and new works are continually produced. The field is a broad one; and, so far, no system has been developed on which all have been able to unite and realize that one great object of scientific ambition is at last attained. Indeed, it is not possible for us, at present at least, to achieve such perfection in the study of disease and the appropriate remedies, that practitioners can proceed with a moral certainty of prescribing the exactly appropriate drug to meet the demands of a case with the same assurance a farmer in sowing seeds is confident of their germination and the producing of a crop. Climates vary; modifying influences are perpetually occurring everywhere, in every country and zone, that render it absurd to attempt the practice of medicine upon uniformly defined principles. If it was not so, then, researches would ultimately be unnecessary, and persons the most ignorant of vital law, of causes, or effects, might give pills and powders with the greatest audacity, on the presumption that the way is unmistakably defined, and that disease, death and the prescription are at liberty to contend for victory.

Without an apology we may, with no sense of humiliation, acknowledge that we are students still, and confess that we are agitated with doubts, and that at no period in the daily toils of a responsible vocation were we ever more solicitous or ambitious to have more scientific light.

Theories are easily enough manufactured. Like castles in the air, they are cheap but unsubstantial structures. They are scarcely more than speculative presumptions. A theory of truth is not the

truth itself; neither is a treatise on the theory and practice of medicine an unerring guide. Approximations to truth may be accomplished. The foot-marks of a traveler over the unknown waste confirmed the belief that a man had passed that way.

A preparation that would nauseate one patient may not affect another. Arsenic, that dangerous and dreadful poison, is swallowed with impunity in the mountainous regions of Switzerland as a cosmetic, a clearer of the complexion and an aid to beauty.

Opium, which is cautiously handled by the most reliable physicians, acts so variously on different individuals and under different circumstances, that no unvarying rule has been presented for its administration.

These are but elementary examples of the futility of an attempt to reduce the practice of medicine to exact rules.

Then what are theories if there is such diversities in climates, constitutions and localities?

Only one rational course presents itself to those who are earnestly desirous of discharging well the duties of a physician, and that is, to be governed by circumstances in relation to patients and medicines, even if somewhat regardless of theories. To be qualified to form a correct judgment, and estimate the gravity of disease and the probable effects of what experience dictates should be given to counteract the destroying progress of a malady is the aim of the Eclectic practice, and it should meet the approval of all well informed practitioners. In this respect eclecticism stands out in advance. There then is the sum of all we can do efficiently, and with a comforting hope of success in the treatment of disease: first to determine with accuracy the peculiar abnormal condition of the individual, and then to medicate in accordance with the advice of those who have successfully noted the effects of remedies. Every organ and every function is continually undergoing modifications. New pains and aches are ameliorated or intensified from thousands of sources which are not readily explained, but which, nevertheless, no one would presume to question, who is conversant with the phases of climate, variations of temperature and the peculiarities of temperament and the influences of mind over the conditions of the body.

Therefore, the field of Eclectic practice is boundless; while it encourages freedom in exercising judgment in therapeutics, which is not permitted in other systems of practice inflicted on modern civilization under the name of science.

Arbitrary rules are not laws, neither is routine practice scientific. Facts of themselves outweigh all the adventitious brilliancy of words without meaning or technicalities that make dark subjects darker.

We must manage disease, then, according to circumstances; employing the best means within reach without blindly following blind guides, who cannot and dare not deviate from an accustomed path.

January 20th, 1869, I was called at four o'clock in the morning to attend Mrs. K. On arriving at the door of a handsome residence in West —— street, New York city, my attention was attracted by loud moans. They proceeded from the second story front room, where, on arriving, I was greeted by the exclamation: "Oh, doctor, I am so glad to see you; I have been in such agony all night!" I discovered lying in bed a very thin, delicate woman, of about thirty-two years of age.

Upon a hasty examination the pulse indicated one hundred and twenty to the minute; the countenance was flushed and anxious. She was suffering from what I discovered to be retained lochiæ.

She had been delivered of her third child by Dr. R. on the 4th of January, sixteen days previously. The labor was natural, but rather long, and had exhausted her very much.

The after-pains being excruciatingly severe, she had, the next day after her delivery, begged of her physician to give her something to relieve her, which he did. It had not only relieved the pain but stopped the entire discharge. He had repeatedly tried to bring it on again, but had failed; he had used poultices, bathed the abdomen frequently with spirits of turpentine, and also had given her internally spirits of ammonia, laudanum, castor oil and spirits of turpentine. She had continued to increase in size till she was much larger than previous to her confinement, and the pain from the tension and tenderness of the surface of the abdomen had become unbearable. She was certain that unless something was done to relieve her she could not live, and that her physician could not help her; indeed, he had said so.

Upon a more careful examination I found her condition to be exactly as she had stated. Her abdomen was enormously enlarged and very tender to the touch; the entire surface was covered with cloths wet in spirits of turpentine, over which was oiled silk. I immediately ordered a cataplasm of slippery elm, as warm as could be borne, placed over the entire abdomen, at the same time administering the following prescription:

℞. Viburni comp. (Hayden's Saturate), grs. ix.
Dioscoreæ villosæ, grs. xxx.
Aquæ bullientis, ℥ j.

This I repeated every fifteen to twenty minutes, and in addition gave five to seven drop doses of Magendie's solution of morphia once an hour. This treatment had the effect of relieving her, and in about two hours she went to sleep for the first time in four days.

About three hours after, on awakening, she complained greatly of the tenderness of the abdomen, and weight of the poultice as being almost unendurable. I continued the treatment, however, during the day, but substituted tincture of gelseminum, in two-drop doses, for the morphia, which she was unable to take on account of its unpleasant effect in her head. On my return to her bedside, at four in the afternoon, I found but little change in her condition since the morning; her pulse was reduced to one hundred and ten, and the pain was less acute, but she was very nervous and restless, and complained of a smarting, prickling sensation of the outer surface of the abdomen. There was also a decided spasmodic contraction of the cervix uteri, and I determined on the application of injections of warm water, administering them for twenty minutes to half an hour. This relieved her very much, and during the application she went to sleep. An hour afterward, as we were again applying the warm water, she cried out joyously: "Oh! something has broken away, and I feel better; I am flowing." It proved, however, to be a dark, offensive, viscous fluid, in quantity at least from six to eight quarts. She continued to discharge this fluid for some five hours; during which time I gave her port wine freely, covered the abdomen with cloths wet in spirits of ammonia and alcohol, equal parts, and double the quantity of water; I also gave her ten drops each of saturate of helonias dioicea, cinchona and scutellaria once an hour; bandaged her well; and at midnight, when I left her, she was comfortable.

On making my call the next morning I found her condition greatly improved; she had had slight uterine contractions all night, which I considered favorable. The recovery was very rapid for about ten days; at which period, getting out of bed against my directions, she took cold, causing a second check of the lochial discharge.

This condition continued, without my knowledge, for some three or four days, when I was again called, and found her suffering from a relapse. Upon the renewal of the former treatment, the injections,

in less than an hour she was relieved, having discharged about a quart of offensive fluid.

Her recovery was slow. In about five weeks she was able to be about her room, weak, but apparently better than she had been for a long time previous.

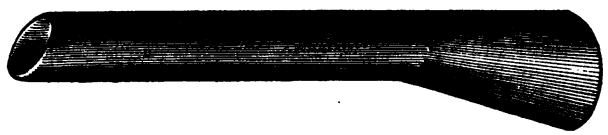
I have not been called to attend her since, except when she was delivered of a fine healthy boy in October last.

64 Irving Place, N. Y.

VAGINAL APPLICATIONS.

By G. W. King, M. D., Saratoga Springs, N. Y.

Nature has only one *direct* passage to the ovaries, which is by way of the vagina into the womb, and from thence through the Fallopian tubes. Is it sensible, then, to believe that it is *always* best to prescribe for uterine and ovarian diseases by way of the mouth and stomach? A disease of the nostril is not easily reached through the ear, neither is a vaginal injection given for bilious colic. A place for everything and everything in its place, is as good a rule for a doctor or invalid as for a farmer or merchant; and, if common sense should be exercised about the nose and bowels, why not use sense which is common when treating troubles of the womb or other organs belonging only to the female?



The above is a representation of the vagina-injector. Specific directions for its use will not be given here, as they accompany each instrument.

It has been discovered that warm water applied to the mouth or neck of the womb for half-an-hour is appropriate treatment, especially in dysmenorrhœa. Its cleansing, soothing, relaxing effects are what makes it appropriate. If, however, the manner of applying warm water to the womb is defective, the remedy is exposed to the unjust charge of being as bad, if not worse than the disease.

What makes one instrument better than another, both designed for the same purpose? It should not be said, because either is new or old, but may be said, because one has practical advantages over the other. For instance: Thoroughly warm the vagina-injector, charge it with warm water and apply its mouth to the mouth of the womb during painful menstruation. If desired, something warm can be

applied to the bulb of the instrument while thus adjusted, and the heat thereby communicated to the water. This is all done with less trouble, with less exposure and agitation of patient, with less water, with less assistance, with less wetting of clothing and with better effect than any other known way. Because a physician or experienced nurse can introduce a speculum with a slot in it into the vagina, and with a syringe or swab (even if an assistant is or is not required to help about holding dishes, instruments, or doing something else) cleanse said vagina, that does not prove the way to be the most pleasing, convenient and thorough. There is no use of naming other forms of vaginal applications to make these facts plainer. Any physician who obstinately clings to what improvements have demonstrated to be inferior theories and practices, or who is prescribing more for his own than his patient's good, cannot be reached with argumentation. Bitter experience and advanced public opinion are the only changes of such.

Does a physician manifest a genuine selfishness who desires to do all the manipulating necessary in the treatment of uterine and vaginal diseases? If a female has a sore upon her foot, no physician would consider it improper to allow the patient to wash it. Then, why should a woman always be kept from washing morbid matter from the vagina? A helpless patient is in a bad, deplorable state, and a doctor who encourages helplessness or inactivity beyond a reasonable limit, cannot be said to be in a better condition.

It is not strange that some physicians who make diseases of women a specialty, are not using the vagina injector, as it is a recent invention, and as custom is nearly as unyielding a tyrant as ever. If those who first declared the table fork to be dangerous and worthless were now living, they would admire it so much that they would eat porridge with it, if they could. For a number of years hundreds of agents have been publishing the fact that the clothes wringer saves labor and clothing; a fact which many, otherwise good housekeepers, do not yet believe. The common floor-mop had a hard struggle against the habit of using the hand-cloth; and now, a few women can be found who prefer to clean floors with a hand-rag. Why is it that some folks are so slow to learn new and valuable lessons? Yes, why?

The following extract from the Chicago Medical Times, illustrates the application of the vagina-injector: "There are three things done by the use of a poultice; first, the imparting of heat; second, the

application of moisture; and third, the absorption of nutritive and medicinal agents. The woody or solid part of a poultice is of no use, only to retain warmth and hold the fluids or solutions which are taken up, either as drink, food, or medicine, by the parts to which the cataplasm is applied. How much less is a compress wet with hop tea, than a bag of wet hops?

A place upon the arm is decided to be in a suitable condition for a poultice; some bruised or pounded herbs (not herbs chopped up, as such would be more liable to have piercing or injuring points) are put upon the diseased arm in the form of a hot poultice; it is allowed to remain all night, and removed next morning. After thoroughly washing the troubled arm, as it can and should be, it is discovered that the bruised herbs have had the desired and required effect.

Now, after such happy results from a poultice upon the arm, it is thought best to try one upon the neck of the womb. If heat, moisture, or the medicinal virtues of herbs will have a good effect upon a sore arm, why not upon the womb, or its adjacent parts which are diseased? Why not expect like therapeutic action in connection with similar pathological conditions? Water is water, and mucilage is mucilage, whether upon the arm or within the vagina, and the laws of endosmosis and exosmosis hold good in either place.

After all, by looking a little further into the laws of cause and effect, it will be found that the neck of the womb cannot be safely given, *in form*, the treatment appropriate for the arm.

1st. If herbs are packed in carefully as hot as can be borne round the cervix, as Dr. Adolphus has directed, they are not easily removed by "using the rubber pump syringe," and if not removed, inflammation must follow the irritation which they will cause. As sure as the vagina contracts about the tube of the syringe, so sure such contraction will hold within the vaginal folds solid matter, although liquids may be forced out.

2d. If normal contraction is too long suspended by forced expansion, weakness is the product, and it is too well known that a weak vagina is a serious trouble. Reasoning from analogy is here of service. A muscle anywhere, stretched for too long a time is injured. The use of the *pessary* has demonstrated, to the sorrow of many a woman, that *art* should be subordinate to *nature*. It should not be forgotten, however, that justifiable expansion is necessary in restoring or sustaining healthy contraction or construction; action and use are as indispensable concomitants of life as inaction is of death.

The question is now asked, can heat, moisture and medicine be applied to the neck of the womb without the danger of having any solid particles retained within the vagina, and so as to avoid a prolonged and exhaustive stretching of the vaginal tissues? It is pleasing to be able to answer that such has and can be done. With King's Vagina-Injector, warm or cold applications being substantially, though not in name, wet compresses or poultices may be put to the neck of the womb in a satisfactory manner, and for any required time. This simple yet effectual instrument can be used between intervals, from five to thirty minutes, "all night" if desired. Its uninterrupted presence in the vagina for a long time would make it as bad as the pessary or packing."

The use of the vagina-injector has made it apparent that sterility or barrenness is not so much the result of a closed mouth or neck of the womb as from morbid secretions in the vagina which injuriously change or neutralize the seminal fluid. Why should it be supposed necessary to cut or stretch the mouth of the womb so that semen can enter it when such mouth is sufficiently open to allow the exit of menstrual fluid, and while it is considered that semen can pass into the fallopian tubes, which have openings no larger than a small bristle?

Relax the mouth of the womb and thoroughly cleanse the vagina, as can be done with the vagina-injector, and, as far as the *female* is concerned, the greatest causes of barrenness are removed.

An earnest effort has been made among a large number of physicians and ladies, during a period of over four years, to find an actual fault with the injector, and the result is like this. Almost all the objections have come from such as have never used the instrument, and none have been offered by those who have given it a faithful trial.

Extracts from many unsolicited letters, from physicians and invalids, which harmoniously praise the injector, could be given. From one of such letters recently received from Ohio, the following is taken: "I brought one of your vagina-injectors from Brooklyn, N. Y., to this place, and gave it to a lady who has used it for nearly a year. A few days since she let it fall and broke it. She came to me for another, saying she would not have taken twenty dollars for the one she had. She has never found anything which could be used with so much ease and so cleanly. It removed all impurities from the vagina, and had relieved her former troubles, inflamed and hypertrophied *os uteri*." Could the indifferent part of the profession, and the

careless, discouraged and falsely educated portion of the public but realize what they are losing, by neglecting the use of the vagina-injector, there would soon be much less of human suffering.

If any excuse is necessary for the use of strong or applauding terms, it may be said that positive, neglected truths, connected with a worthy object, have been prompters.

MATERIA MEDICA.

Report by D. E. Smith, M. D., Brooklyn, New York.

"The flora of North America is astonishingly rich in remedies," says Prof. Waterhouse; and the Eclectic branch of the medical profession in developing and preparing these remedies, have proved the saying emphatically true.

Thirty-five years ago the materia medica of our country contained but few agents, and unfortunately these few were of the most deleterious nature, consisting chiefly of mercury in its various forms, antimony, arsenic, lead, zinc and opium with the lancet accompanying their use. The terrible consequences resulting induced Dr. John Forbes, member of the Royal College of Physicians in London, and editor of the British Quarterly Journal of Practical Medicine, to make the following assertions:

1st. "That in a large proportion of the cases treated by allopathic physicians, the disease is cured by nature and not by them.

2d. "That in a lesser, but still not a small proportion, the disease is cured by nature in spite of them; in other words, their interference opposing instead of assisting the cure.

3d. "That, consequently, in a considerable proportion of diseases, it would fare as well or better, with patients, in the actual condition of the medical art, as now generally practiced, if all remedies, at least all active remedies, especially drugs, were abandoned.

"We repeat our readiness to admit these inferences as just and to abide by the consequences of their adoption. We believe they are true. We grieve sincerely to believe them to be so; but so believing, their rejection is no longer in our power; we must receive them as facts until they are proved not to be so."

What humiliating admissions; and the authority is not to be questioned.

Such was the condition of the materia medica of our country when the Eclectic physicians, led by Thomas V. Morrow and his fellow-laborers, came on the stage of action. We constitute a distinct school of physicians, and as such have had a double mission to perform.

1st. Upon us devolves the work of instructing the people that calomel, antimony and the lancet are mischievous and unnecessary as therapeutic agents. Facts demonstrate how well this has been done. The lancet, "that minute instrument of mighty mischief," rusts in its sheath; calomel and antimony are becoming obsolete. Where pounds were once purchased scruples now suffice, and year by year their application as medicines is growing gratifyingly less.

2d. The Eclectic branch of the medical profession has very appropriately been called the *vanguard* of the great army of medical men, and as such they have been called to go before; to take the lead in suggesting and discovering remedies to cure malignant diseases; many of them heretofore regarded as incurable; and also in effecting the cures in one-fourth the time and at one-fourth the expense which the self-styled regulars profess to perform the same. As has been cited, Dr. Forbes declares that nature cures their patients in spite of them.

Especially have the Eclectics led the van in discovering and developing the rich materia medica of our country. Through the agency of organic chemistry they have perfected and given to the profession about *seventy* new agents, which are rapidly supplanting the so-called remedies of the "old fogies." We say old fogies because our old school brethren are among the last to learn new truths; and not until public opinion compels them to do so, will they submit to change. Johnson has aptly described these old fogies in this sentence:

> "They that will consent to trudge behind
> Were never made to walk before."

Fifteen hundred pounds of *one* of our new remedies (the Podophyllim) were sent to Europe from one house in Cincinnati during the past year; and it is supposed that over one million dollars worth of the new remedies which were brought into use by the Eclectics are now sent to Europe every year. These medicines are now used in the various hospitals of the old world. But unlike the "old school" doctors of America, who are *willing to steal and use our medicines without giving us credit*, the physicians connected with these hospitals unite in saying, and have published the same in the leading medical journals, that "these remedies having been put to the clinical test, perform all that the American Eclectics claim for them."

Your committee would earnestly recommend to all physicians the thorough and complete work recently revised by Professor King of Cincinnati, called the "American Dispensatory." No Eclectic physi-

cian can afford to be without it. Professor Hallembaek, of Philadelphia, has recently published a valuable book, titled, "The Eclectic Materia Medica." It is well arranged, and contains much that is of practical use to the physician. Your committee would recommend this work to all, especially to students as a text-book.

There is a valuable book just published by Edwin A. Lodge, M. D., of Detroit, Michigan, called "Homœopathic Materia Medica, New Remedies." It contains eleven hundred and forty four pages, and abounds with valuable hints. The author of this work has given the Eclectic physicians due credit for their discoveries. No physician, of any school of medicine, can read this book without being a wiser man, and better qualified to discharge the responsible duties of his profession.

In conclusion, your committee would say, that as far as they have been able to ascertain, the Eclectic physicians of America are still quietly exploring the field of organic chemistry and adding to the number of their peculiar remedies. They are also treating *ninety-eight* cases out of every one hundred of their patients successfully, and showing to the people that there *is a simpler*, *safer* and far more *pleasant* and *shorter road to health* than the one they have been wont to travel.

CHOREA, OR ST. VITUS'S DANCE.

PRESENTED AT THE NINTH ANNUAL MEETING OF THE ECLECTIC MEDICAL SOCIETY OF THE STATE OF NEW YORK.

By H. C. Taylor, M. D., Brocton, Chautauqua County.

Chorea is a genus of disease, arranged by Cullen in the class Neurosis and order Spasmi. Others, however, have supposed that it is the result of paralysis, or absolutely a paralytic affection, rather than a convulsive disorder. But it is not my design to speculate in regard to the pathology of the disease, for this seems as yet to be shrouded in mystery, and the speculations and investigations for the last two hundred years and more, have had the effect only to bring the investigator back to the point from whence he started. The precise condition of nervous centers, and particularly the *sensori-motor* centers cannot be determined, and it is worse than useless for me to speculate with reference to it.

In all cases, however, that have come to my knowledge, there has been a large preponderance of the strumous diathesis. A want of proper development of the basilar portion of the brain, that portion governing muscular development and muscular action. Had it not been for this faulty development, the same exciting causes would have been less liable to produce the disease in question; in fact, they could *not* have produced it, and they would have been but local diseases of themselves, or appeared in other manifestations. This in particular is true, I believe, in all cases of chorea said to be hereditary. In fact the remark may apply to all cases arising from whatever cause. The disease is not of itself transmissible, but rather a faulty development and a peculiar susceptibility that allows of such manifestations upon the appearance of anything that disturbs the normal condition of the nervous centers. It matters not how perfect the physical development, aside from this one thing, if there is a deficiency of vital muscular power, resulting from a diminutive cerebellum, and that with-

out the power of development, together with this peculiar sensitiveness, *chorea* will be the result. The brain is the great negative center of the system, where reside the sensational, and the emotional and all the faculties that are ever made manifest in the actions of men. According to its abilities it controlls the various organs of the body, and its ability is in strict accordance with its perfect development or otherwise.

I do not wish to be understood as saying that this development, simply as a matter of necessity, will produce chorea, but rather, this peculiar susceptibility, influenced by various causes, such as may and do result from defective nutrition, deficiency and depravity of the blood, in many cases amounting to anæmia, capricious appetite, torpid liver, sluggish bowels, deficient and faulty capillary circulation, headache, rheumatism, etc., occasion in some hidden and mysterious manner, that peculiar pathological condition of the nerve-centers, the real disease in question.

I will now proceed to indicate such treatment for this disease as has appeared to me to be the most rational, after the experience of a practice of over twenty years, the treatment, of course, varying to suit the supposed peculiarities of the case; for although the primary cause may not be apparent, the proximate causes are numerous. I will class them as I proceed, giving the treatment of each as full as shall seem necessary.

I. Those termed Hereditary.

Hereditary chorea, or that termed such, exists less often in childhood than in after years; and I believe that if the laws of health were but strictly adhered to a large majority of such cases even would never occur, but a departure from the rules of healthy existence is sure to be followed by the disease. If cases of hereditary chorea can be seen in season or within a short time after their appearance and they are not complicated or existing in a bad or depraved constitution, may be improved, though I have little faith in any permanent benefit.

I have treated but two cases of this class, and those were so slightly benefited that my conclusions were decidedly unfavorable as to anything radical having been accomplished after the system has fairly taken on the disease. With one of them it was manifest in the usual form, partial at first, but afterward becoming general with the most violent and horrible distortion of the features, and a fearful agitation of the whole muscular system, except during the hours of sleep. In

the other case the sensorial nerves seemed to be the seat of the disease, and the life of the patient was a continuous scene of suffering. These cases were in the same family, and, without doubt, the cause was the same, though the outward manifestations were so widely different.

Let me say once for all that the treatment of cases of chorea, under every and all possible forms, patients should be surrounded by the most favorable circumstances possible and shown the utmost kindness. One writer says that nothing should be permitted to agitate or irritate them; even their whims and caprices must be borne without rebuke, and gratified so far as is consistent with health and the necessary administration of remedies. The depressing emotions of fear, grief or shame should, on no account, be produced in the mind. Anger, although to be avoided also, is not nearly as injurious as either of those named. The pleasant emotions of mirth, hope and love appear to be of benefit, and should be promoted.

Thus much for the moral aspect of the treatment. For the medical treatment of cases under the form we are now considering, and especially in its earliest stages, use the following: Alcoholic extract of macrotys or cimicifugæ racemosa made into pills, with the supercarbonate of iron, administered as the patient will bear, say from one to four pills three times a day. In connection with these pills use two of the following:

℞. Strychniæ Nuc. Vom., grs. ij,
Vini Spts. Dil., ℥ ij.

Dose, one to three drops twice a day.

The patient may use the soluble citrate of iron in doses of two grains three times a day, in connection with fluid extract of macrotys racemosa and liriodendron tulipifera twice a day, to suit the condition of the patient. But I would have more faith in the first formula. In all cases of chorea the digestive organs are at fault; the gastric glands are especially dormant, and the food is hurried from the stomach imperfectly prepared for the organs below, thus proving an irritant, and aiding materially in producing and keeping up the excited condition of the system, and no remedy with which I am acquainted will produce so prompt and decided an influence, and cause a healthy secretion of gastric juice, as strychnia in the form which I have indicated. At the same time its anti-spasmodic influence will not fail to be noticed. The spine should be well bathed twice a day with hot salt and water. It is better to treat the disease upon common sense

principles than attempt to follow out any routine or specific treatment, for when the remedies and the sources of treatment recommended are so abundant, as in these cases, it may be set down as a rule they are not very efficient, so I will give you the better portion of my experience, and let the balance go by unnoticed. The remedies I have indicated, exhibited properly in recent cases, and with the most favorable surroundings, will produce favorable results oftener than any treatment that has come to my knowledge; but such cases, even, cannot be approached with any large degree of confidence of success. And, gentlemen, let me say to you that, if you are called to treat a case of this class that has become established, you will do yourselves the most credit to at once acknowledge yourself and your remedies impotent in the case, make your bow and retire.

II. Cases Caused by Worms.

I have witnessed several cases of chorea from this cause, some of them produced by the presence of the lumbrici, and others from the presence of ascarides, and in all cases the subjects were under twelve years of age. The usual symptoms of worms and the history of the case will not fail to lead the practitioner to a proper diagnosis. When produced by the round worm, no more efficient remedy will be found than the following:

℞.	Santonine,	grs. iij.
	Salacine,	grs. ij.
	Podophyllin,	gr. ss.

Mix, and make three powders; give one every night until they are all taken; then allow six days to pass, and repeat the treatment. Continue as long as shall be thought advisable or necessary. After the expulsion of the worms the symptoms of the disease will in a large degree cease; but if any remain, the tincture of strychnia, before spoken of, may be used with every confidence of success. The santonine should not be continued too long, not more than three days, lest it produce strangury.

For ascarides, take equal parts of populus tremuloides, Venice turpentine, Barbadoes tar and oil of sweet almonds; mix by shaking while warm. This mixture is mechanical, but answers the purposes for which it is given. Dose, eight to fifteen drops, in sugar, three times a day. This seldom fails to remove large numbers of these troublesome rectal lodgers and of producing almost immediate relief. After the use of this remedy to the extent thought advisable, some

good vegetable tonic should be administered, like the fluid extract of populus tremuloides and fluid extract of liriodendron tulipifera, in suitable doses.

III. Spinal Disease.

In cases arising from this cause, the compound tar plaster is the remedy; the practitioner exercising his best judgment in regard to the extent of its use. Its application however should be premised for a week or two by tonics and restorative treatment, which should be continued also for a considerable length of time after the plaster shall have done its portion of the work in hand, as a syrup of macrotys racemosa, eunonymus atropurpureus and berberis vulgaris, used as the circumstances of the case demand. If the nervous system still retains the old impression and the choreic manifestations to some extent still continue after the spinal irritation has subsided, the tincture of strychnia will hardly fail to control them.

IV. Excessive Venery, Onanism and Unsatisfied Sexual Desires.

Nothing is more fruitful of mischief in all cases where the choreic tendency exists. Cases may occur from either extreme, and they are troublesome beyond comparison. They may occur at any period, from puberty onward. The confidence of the patients must first be obtained and their solemn promise recorded to aid you in every endeavor, morally and otherwise, in the treatment of the case.

It is very likely that the patient may not be aware that his or her misdeeds are the source of the difficulty. That fact impressed strongly upon the mind and the conviction followed by abstinence, will do more toward a cure than remedies. As far as remedies are to be sought the bromide of potassium in suitable doses will partially and, possibly to a considerable extent, control the excesses, but very often fails of producing any permanent benefit. Possibly the *aments* of the silex nigra will be found more serviceable and their influence more permanent; in fact they have been known to control all sexual desires, and even efforts at erection. The aid of the patient having been secured and the cause of the difficulty to a large extent controlled, the administration of a pill composed of the extract of macrotys racemosa, carbonate of iron and hydrastis canadensis as shall seem indicated, with one dose daily of tincture of strychnia, will hardly fail to accomplish the cure. Good, nourishing diet should be taken, and the rules of health strictly observed.

V. Softening of the Brain.

In this class of cases, at first and before all other measures, restore and keep, in as perfect order as the nature of the case will permit, the nutritive functions. In connection with a good nourishing diet, meat, eggs, milk, etc., use quinia, iron and manganese with as much freedom as the case will allow; and let me say that whatever else you may use, never fail of using freely an infusion of the myrica cerifera. I have great confidence in this remedy in all cases where there is a failing or wasting of the energies of the nervous mass. In all cases of this class, if we succeed in restoring the nervous fiber to a healthy condition our task is done. The system at once yields its wayward impress and there is seldom need of further treatment.

VI. Puberty.

Tincture of macrotys and caulophyllum, in drop doses, the first on rising in the morning and the latter on retiring at night; also tincture of pulsatilla, eight drops to four ounces of water, and given in tea-spoonful doses every hour on the first indications of an effort on the part of nature to establish a periodical visitation, will hardly fail of producing the desired effect. I have cured cases of this class by using a syrup of the roots of the leonurus cardiaca, roots and tops of the polygonum punctatum, and the anthemis cetula, that had become very troublesome and far advanced.

VII. Syphilitic, and all Taints of that Nature.

It is useless to attempt a cure of a case of chorea when this taint was the *cause* and still *exists;* but I need not detail to you a course of treatment for the removal of such taints, for all of you have favorite formulas, no doubt, and are successful in your treatment. But with this class, in a large majority of cases, the disease in question does not cease upon the removal of the proximate cause; but the nervous system having taken on the habit or impression retains it, and the manifestations continue, though less violent and troublesome. For this may be used with confidence every morning, sulphate of quinia, grs. iij, valerianate of zinc, gr. j, and an infusion through the day of cypripedium pubescens and quinquifolium.

VIII. Amenorrhœa and Dysmenorrhœa.

In all cases in these two classes there is such a strong tendency on the part of nature to a return to health, and the choreic difficulty to

cease on the establishment of healthy catamenial functions, that I deem no remarks necessary in regard to them. As I said with reference to syphilitic taints, you all have your remedies, and are no doubt successful in the treatment of all curable cases. Yet I would recommend the treatment detailed under the head of puberty.

IX. Mental Emotions, as Disappointed Affections, Fear, Shocks, Frights, etc.

Very little by the way of medication is necessary in these cases. They are a class by themselves. They need and must receive the most kind and careful treatment. They demand of the practitioner the best energies of his mind. Sleeplessness is a prominent difficulty and must be regularly controlled, in order to induce a habit in nature to rest at a certain point of time. Gelseminum, stramonium, chloral, ether, and, if need be, morphia may be used; carefully and gradually withdrawing them when safe to do so, that a habit in their use be not formed. A mild, gentle, and unirritating tonic course should be pursued and persisted in for a considerable length of time. The balance of the treatment should have a special reference to its moral influence. There should be a continued change of scenes and scenery; and whatever of a cheerful nature or has a tendency to divert the attention of the patient from the source of his or her troubles should be resorted to. Directing thus the moral and the intellectual natures of the patient requires a faculty that but few comparatively possess. The physician is often tasked to the full extent of his powers, and unless possessed with a large degree of perseverance may fail, though by untiring energy most cases may be cured, and the choreic manifestations will gradually disappear.

X. Gastric Irritation.

The history of cases in this class will not fail to lead the intelligent practitioner to a correct understanding of their cause. They are usually troublesome from want of proper care on the part of nurses, and patients themselves, and a pandering to a depraved appetite that is usually an attendant. But with favorable surroundings, the influence of the disease may be overcome and the patient saved. The utmost care should be exercised with reference to regimen in every sense. Within the last four months, I have treated a case of this class, and with favorable results. To relieve the gastric irritation, I used the following: Infusion of hydrastis canadensis, a desert-spoon-

ful with bromide of ammonium, three grains, before each meal, to relieve the nervous symptoms, and as a tonic to improve the tone of the gastric glands, I gave tincture of strychnia eight drops to water, four ounces; dose, a tea-spoonful every three or four hours. I also bathed the spine with oil of lavender, half an ounce; alcohol, two ounces; sulphuric ether, three ounces; laudanum, two drachms; once every twenty-four hours. This was an extreme case, and I was gratified to witness an improvement within one week from the first exhibition of remedies.

XI. Falls and Blows.

The injury producing chorea in this class, will usually be found about the head or spinal column. There is usually a phlogistic condition of the system, a constipation of the bowels and a consequent disturbance of the circulation. In this, as in most of the classes to which I have or shall refer, the history of the case must determine with the physician the proximate cause of the difficulty. The local treatment should be in accordance with the supposed exigencies of the case, and such as would very readily suggest itself to the intelligent practitioner. As internal treatment, give from one-sixteenth to one tenth of a grain of belladona daily until the constipation of the bowels disappears, and afterward an occasional dose as shall seem indicated. If the phlogistic condition and the dullness of hebitude of the system does not disappear upon the correction of the torpor of the bowels, as it probably will not but in part; use fluid extract of veratrum viride to the extent necessary to meet the indication. As a remedy for the disease in question, give tincture of nux vomica, one to three drops in water twice a day, alternating with valerianate of zinc, a half grain, twice a day. Occasionally, a case will be found, when it will be advisable to apply the compound tar plaster, as near the base of the brain as possible, or to the spine, if that be the source of the disease.

XII. Repulsed Cutaneous Eruptions, as Scabies, Miliain or Cases arising from Improper Treatment of Tenia Capitis when Rapid Absorption of the Veins has taken place.

In these cases the local treatment should be prompt and efficient. The compound tar plaster should be applied to the head in tenia capitis, and continued until a free discharge of matter takes place. In a repression of eruptions the surface should be freely bathed in

weak lye, to which a little ground mustard may be added and repeated daily. Internally, the compound powder of senna and jalap, with sub-tartrate of potassa, should be given to the extent of producing a free evacuation of the bowels, after which action diaphoresis should be promoted and continued for several hours. This should be followed by a syrup of diascorea villosa, leonurus cardiaca and the bark of the root of the liriodendron tulipifera, with iodide of potassium, and continued for several weeks. Other treatment is seldom necessary.

XIII. Translations of Rheumatic Affections to the Spinal Chord.

In cases of this class the compound Stillingia liniment of the Eclectic Dispensatory should be applied to the spine with considerable friction, and a syrup composed of macrotys racemosa, aster æstivus, with iodide of potassium, should be used internally, and its use persisted in until the rheumatic difficulty and the choreic manifestations disappear. If there is a congested condition of the spinal cord, or an inflammatory condition of the roots of the spinal nerves, the fluid extract of veratrum viride in proper doses, and repeated at proper intervals, is the remedy you may rely upon with confidence of success.

XIV. Chorea may Depend upon anything that Tends to Irritate the Nervous System; or it may Exist Entirely and Independently as a Nervous Difficulty without any Appreciable Cause.

This being the case, and when the practitioner is at a loss with reference to the cause, he must treat upon general principles. The patient should have the benefit of every external arrangement possible, and the moral and intellectual surroundings should be of the highest order. Some of these cases, or those belonging to this class, have been cured by the use of the shower bath; some by the alcoholic extract of polygonum punctatum, with iron and manganese; others, and particularly young females, when there was the least evidence of renal disease, by cannabis indica, and others, still, by electricity. In some cases, when the difficulty was partial, as in one limb, splints have been used with success; all the remedies graduated, of course, to suit the exigencies of the case.

XV. A moment since it was suggested to me that chorea might be the result of an inflammation of the cardiac valves. It is true that this condition exists in most cases of chorea that have been examined,

and it may be an invariable accompaniment, but I am not prepared to believe that this condition produces chorea, or in fact that chorea has anything to do in producing this inflammation; but I am inclined to the belief that it is brought around by deteriorated blood, being influenced and produced by the introduction of impure products and fibrinous particles. When this occurs there is invariably an excited action of the heart and arteries, they being unduly wrought upon by this abnormal condition of the blood, and the delicate texture of the valvular structure suffers as a matter of consequence, but not more in this disease than in most of a strumous character. The indications of cure in these cases may be met by the use of the remedies named under my last head, viz., the internal use of veratrum, iron and manganese.

It will be seen that I have resolved my indications of treatment into the following: First. When the proximate cause is known, or any circumstance is discovered that may be suspected of causing or increasing the nervous disorder, it should be removed by suitable measures. Second. Make use of all and every proper means to overcome the nervous disturbance. Third. A promotion of the nutritive functions and sustaining the various secretory and excretory functions of the system.

I have not spoken particularly of the very great importance of a strict attention to the surface in all and every case, but will not allow the opportunity to pass without urging it upon your attention, and that it be placed first on your list.

You will please excuse me for detaining you so long, it was not my intention to do so, but material crowded upon me in so many forms that I was obliged to add to my original programme quite largely. I have said little however to what might have been said with reference to this difficulty, its proximate causes and its treatment.

Since writing the above, I have come to believe that, although the primary cause of *chorea* is not known and its hidden mystery will remain such for a long time to come, the seat of the lesion is located in the nervous centers at the base of the brain, "which nervous centers receive the impression from it and transmit it in the form of volitional impulses to the muscles."

THE COUNTERBLAST: AN IMPEACHMENT OF NOXIOUS MEDICINE. NO. 1.

By Alexander Wilder, M. D.

The New School of Medicine is at issue with the Old on the character of the agents employed as remedies. It is the party of innocuous medication. It rejects the use of the lancet as unnecessary and therefore murderous. It discards the various preparations of mercury, as being irritant poisons of obvious inutility, and manifestly improper to employ. It expels antimony from the pharmacopœia, as always creating diseased conditions whenever used; disorganizing the blood and depriving it of its essential vitality. It dispenses with the various compounds of arsenic, because they are not healing agents, but poisons. It gives its testimony against lead, because of the noxious influence of that metal, in whatever form, upon the vital economy; whether as an internal remedy, a lotion, or hair dye. This list of discarded agents ought to be enlarged, and no doubt will be, as medical men become more intelligent and more conscientious. The bold and manly ground taken by our State organization is the only ground that can be consistently occupied, the language of the preamble and platform will show:

"The undersigned, having duly associated and become a corporation, pursuant to said act, by the name and style of 'The Eclectic Medical Society of the State of New York,' have adopted the accompanying code of by-laws; and in order to declare without equivocation the cardinal doctrines and usages by which we are distinguished, do each severally subscribe and set forth the following

Platform and Declaration:

"'The life itself, the principle often called 'the healing power of nature,' is the sole force capable of removing disease and maintaining the conditions of health. The physician is therefore the minister and auxiliary of nature; and it is his vocation to know and apply remedial agents which conform exactly to the laws of life, and aid the

physical system to relieve itself of morbid elements and recover the normal performance of its functions.

"We accordingly reject as medicines those agents or substances which are known to be baleful and poisonous in their character, having for their use no necessity or adequate justification, and exclude from our catalogue of remedies, *wholly and unqualifiedly*, bloodletting, the several compounds and preparations of mercury, antimony, arsenic and lead; while, in the present imperfect condition of medical knowledge, we accept and retain other agents, chiefly inorganic, which are nevertheless open to objection. At the same time, we hope to be enabled eventually, as new discoveries and applications of medicines are learned, to use only remedies which are wholly sanitive and efficient, being derived from the organic world, and so acquiring their virtues from the operation of the mysterious principle of life which permeates them."

It is well known that the position taken on this subject by the Eclectic Medical Society of the State of New York has always been maintained by Reformed physicians; and we are convinced of its propriety as we are of its policy. If we come short of it there is no ground on which we can stand, making a separate organization worth the maintaining. Nevertheless, we would not assume it but for believing it to be true. It is not, in any legitimate sense of terms, partisan or exclusive; genuine knowledge always makes its possessors liberal and fraternal. "We accordingly accept no code of ethics which is in conflict with the golden rule: 'Whatsoever ye would that men should do to you do ye even so to them.' Nor can we esteem any information lightly, however it may have been contributed, which shall enable us in any way to be more useful in our vocation. The art of healing, like civilization itself, is daily improving, expanding and becoming more perfect."

Observation and experience have amply justified our sweeping rejection of the murderous agents here indicated. They do not heal; they add nothing to the volume of the vital power; they exhaust the physical energies and waste the life. We therefore recognize and acknowledge no pathological condition in which they are more potent and beneficial than the eclectic medicines; on the other hand, as remedial agents, their "wickedness is great in the earth, and their operation only evil continually."

The New School has two agencies by which to sustain its independent position, scientific learning and innocuous medication. When it lets

go of either it must go by the board. No pretense of liberality can save it, nor any assumption of superiority. Intelligent persons are not going to submit to the medical care of ignoramuses, nor knowingly let any practitioner dose them with mercury, arsenic or antimony. Even the practitioners that use these agents are generally moderating their doses, and it is hardly fashionable to poison men as one would poison rats. It has always been the recommendation of Eclectic physicians to their patients that those drugs were not used by them. It does not belong to their vocation to "kill a man to save his life."

Samuel Thomson failed to establish a school of physicians who could be proud of his leadership, because he scouted and derided the acquisition of technical knowledge. "I hate their terms as I do their calomel," he declared. Hence, although every new agent which he introduced into the materia medica was of untold value; although to his fierce denunciations we are indebted for the disuse of bleeding, the common people giving physicians the choice to dispense with the lancet or go without patients; although he taught the world the everlasting verity of medicine, that mercury, antimony and arsenic were poisons, and totally unfit to be used as remedies, and the world has not done him justice, yet, by despising medical learning and declaring that technical knowledge was of little account, he failed to establish a system that would continue and maintain its progress in keeping with the requirements of the age.

Hence it was necessary to establish the Eclectic school. Inside the ranks of those physicians professing to be "regular" there was not a foot's breadth for a reformer to stand upon. The twenty-dollar pamphlet, filled with cant, doggerel and stupid invective, which was once hawked about, was as much calculated to disgust as to instruct. But Thomas V. Morrow, the patriarch of Medical Eclecticism, when he established his little college at Worthington, Ohio, placed a fulcrum upon which reformed medicine could fix its leverage. Discarding noxious medication on the one hand, and reaching out with the other for every utterance and scintilla of knowledge that could be obtained, he and his fellow-laborers thus succeeded in laying a broad foundation. Honor to their homes, fragrant forever be their memories. The work which they began it is our province to carry forward. We have no discharge while inorganic poisons infest the materia medica, and till only remedies made fit by the baptism of organic life and vital potencies are used in healing the bodies of men.

Bleeding.

Perhaps the greatest change in modern practice, effected by the labors and testimony of practitioners of the new school, backed by an aroused public sentiment, is the discarding of venesection. Thirty years ago, every physician almost, called "regular" was as regular in the employment of the lancet on every new patient, as in his visits. General Washington, Lord Byron and Count Cavour, are sad examples of this mischievous practice. No man in common health, perhaps, could undergo the same treatment and survive. But "a more excellent way" has been shown, and only a few of the older members of the *soi-disant* regular profession now bleed. The entire Homœopathic school stand side by side with the Eclectics in the reform. The reformer can reiterate the words of the patriarch: "With my staff alone, I passed over this Jordan, and now I am become two bands."

But reforms are generally accepted with great reluctance by elderly persons. Washington Irving and Joe Jefferson have perpetuated in the mind of "Young America," the idea of a man of a former generation appearing at a subsequent period with the toadstools on him that had sprouted from spores deposited on his shoes in the "good old times." Even the Talmud tells of Rabbi Coniah, who once slept a long sleep, and awoke to find his name famous, but his doctrines misapplied. If like mutations occur in the medical world, what marvel? Oliver Wendell Holmes has already introduced us to Young Rip Van Winkle, M. D., who slept thirty years, and then began anew his practice. He looked ancient, "for people love their doctors mouldy, like their cheese;" and so a handsome practice was soon commenced. But a patient died, and a second was fast following him, when a consultation was held. Little respect was paid to the veteran; his leeches were compared to an adder or rattlesnake; and he was told that he was thirty years behind the times. He accordingly withdrew from active business and retired to his barn, to sleep out the years, only awaking to attend the annual meetings of the medical society, till the old practice came around once more into fashion.

But the last year witnessed an effort at his resuscitation and reinstatement at the lead of medical practice.

At the monthly meeting of the Medical Society, old school, of the county of New York, for December, 1870, Dr. Fordyce Barker, who stands among the foremost in his denomination, read a paper upon the subject of "Blood-letting as a Therapeutic Resource in Obstetric Medicine." He introduces the subject by informing us that on the

day following his return to New York, after his summer vacation, he was called to see a young married lady in the sixth month of her first pregnancy, whose symptoms were such that he considered blood-letting indicated. Having no lancet in his pocket, he repaired to the surgical instrument shop at the corner of Broadway and Thirtieth street to procure one, when his demand was politely answered by an expression of regret that there was no lancet in the shop. This is the only shop of the kind for two and a half miles from the business center of the city, and the fact is significant of the change in medical practice. For fifteen years past Dr. Barker could not recollect a single instance where blood-letting had been resorted to, except a few cases of puerperal convulsions. Yet, thirty years ago, the "standard authors," of whom eighteen are named, advised it for uterine irritation and uterine plethora, erratic pains, cramps and numbness of the inferior extremities, spasmodic cough, palpitation, pruritus, varices, inquietude, loss of sleep, solicitude and anxiety, headaches, drowsiness, vertiginous complaints, hemiplegia, anasarcous swellings of the lower extremities, to prevent abortion, and also to promote expulsion when abortion is inevitable. The doctor remarks: "Now, as some of the above large catalogue of symptoms was pretty sure to occur during gestation, parturition or the puerperal period, it came to pass that formerly a large majority of women were bled during the above period."

He is of the opinion now that blood-letting is too much neglected, and, "as his clinical practice becomes enlarged, he is getting to bleed more frequently. He does this for uterine congestions, apparent cerebral congestion as marked in the temporary albuminuria of pregnancy, convulsions during labor, great fullness of the vascular system, uræmia, and certain very rare forms of puerperal mania." He cites Dr. Benjamin W. Richardson, president of the medical society of London, as also advising the use of venesection.

The discussion which followed the reading of the paper of Dr. Barker exhibited the noteworthy fact that the older members of the society had made little change in their sentiments in regard to blood-letting. So far as "the general sentiment" has brought about a reform in practice, they have accepted it with an ill grace, and the change was also pretended. Laying aside their lancets, they imported leeches from South America with which to bleed their patients; and, perhaps, if these had been discarded, they would have procured musquitoes from New Jersey, or vampyre bats from Micronesia.

No wonder that in the middle ages physicians were nick-named "leeches," after their favorite reptile, as when, at a later period, when they adopted mercury (German, quäck sälver) as a medicine, they were denominated "quacks," a name which is their birthright.

Dr. Peaslee believed that blood-letting should be confined to plethoric patients; but in eclampsia he thought "there should not be a single doubt as to its immense value." He had been in practice twenty-nine years and seen all the change in opinion on the subject. But, added he, "we are all of us taking blood in our daily practice and cannot get along without it. If we apply a single leech we take blood; if a dozen, we take more; in venesection we take it more rapidly and with more certainty as to its amount; there is no other material difference."

Dr. Isaac E. Taylor, though by no means an advocate of frequent bleeding, thought that if the two conditions of active congestion and hydræmia could only be clearly distinguished, there would be no treatment of greater value in the cases which indicated blood-letting.

Dr. Barker explained that in a certain class of cases of anæmia and hydræmia the deficiency of red corpuscles may be accompanied with excess in the quantity of blood, such as to produce local congestion; and so blood-letting may be necessary for relief. In the convulsions of parturition it was only required to prevent lesion of the brain and apoplexy.

Dr. F. D. Lente, "in an obstetric practice of twenty years, had seen many cases benefited by blood-letting. He was speaking especially in cases of threatened uræmic convulsions, which probably constituted nine-tenths of those in which the question arises. But he had seen many more patients benefited by other remedies than bleeding." On the whole, he should rely upon such agents as morphia, chloroform and veratrum viride in puerperal.

Dr. James L. Brown was more positive in opposition to blood-letting. He represented a class of physicians whose experience has fallen within the period of the last fifteen years or so, in which blood-letting has hardly been practiced at all. During that time he had never seen venesection done. He thought that the long list of ailments cited by Dr. Barker, in which the old authorities all agreed to bleed, constituted a full answer to the question whether they were mistaken. In many of these ailments we now know beyond a doubt that bleeding is injurious. These conditions had been mentioned in the paper as furnishing indications for blood-letting, congestion of the

uterus, congestion of the kidneys, and congestion of the brain. He had never seen a case in which he could diagnosticate congestion of the uterus during pregnancy. In chronic Bright's disease, aggravated by that condition, puerperal convulsions are occasioned, but no amount of blood-letting could relieve the uræmia, as it could not remove the ural lesion. It is a question whether or not venesection is of any service in the capillary congestion of the kidneys, to which it is generally believed that convulsions may often be attributed, and as to cerebral congestion it is well known that there are those who deny that bleeding can affect it at all. Dr. Bennett declares that "no amount of blood-letting can diminish the amount of fluids in the cranium." Trousseau very positively forbids it in all such cases as those referred to by Dr. Barker, believing it can only hasten the death of the patient. As for plethora, Dr. Brown doubted whether there really is such a thing; he had never yet seen a man whom he thought to have too much blood in his veins. Dr. Chambers, in his "Renewal of Life," not only had asserted his own disbelief of the existence of the plethoric condition, but also that he did not know any intelligent physician who did believe in it. Dr. Brown declared his own belief that the profession had not dropped blood-letting without good reason. It had also modified its heroic dosing since Homœopathy taught it that many diseases would get well without medicine.

Dr. Hubbard, repelling the progressive views thus boldly propounded, declared that he had bled in every case of puerperal convulsions that had come under his hands, and would continue to do so. Dr. Prince was also prepared to endorse in full what Dr. Barker had said; "in his own experience, blood-letting had proved more efficacious than any other treatment."

Dr. Austin Flint said: "Although he had been, when young, opposed, he had found himself, for the last few years, an advocate of blood-letting to a certain extent;" and ventured the prediction "that not many years will elapse before we shall again find the profession practicing it, though in a very different way from our predecessors. *The lancet is again to find its place in our armamentarium.* Before many years we shall find mercury again held more highly in esteem."

The President of the Society, Dr. Abraham Jacobi, concluded the discussion. He believed that venesection should never be resorted to, except in a class of inflammations which Dr. Flint had mentioned. Its benefits he regarded as purely mechanical; it will cut off inflammation at the first stage, solely because it relieves the local hyperæ-

mia, the blood-vessel pressure. In pulmonary œdema the air-vessels and bronchial tubes are rapidly filling up and the patient is suffocating; "if anything will relieve this it is venesection." The same held true, he declared, in œdema of the brain; "we can only ask: Will this patient live for half and hour if I do not resort to venesection? The symptomatic condition is thus fulfilled; in most cases we shall afterward have time to decide what shall be done to relieve not only the general previous œdema, but also the added troubles brought about by our enforced interference. So, also, in all the cases mentioned by Dr. Barker;" he added, "I believe we are to resort to venesection simply to save the life of the patient."

Remarks.

It is related that once when Rome was in peril, it was proposed to revive the worship of the old gods of the empire. Burning a few Christians, after rolling them in pitch, used to constitute a pleasing entertainment on such occasions. These old school practitioners appear desirous for an analogous revival of religion. Unwillingly they dropped their lancets, deceptively employing instead their namesakes, the leeches. Homœopathy, itself a mitigated form of old school practice, barring its Homoiousian theory, has proved that the execrable drugs, with which patients had been poisoned by hecatombs, were unnecessary. They yielded only because the people had forced on them the alternatives to stop bleeding or do without patients. Much as they loved their "scientific practice," they loved gain far more. Cupid was supplanted by cupidity.

However, these men are getting old; and this exhibition of their youthful foibles superseding the experience of maturer years, demanding again their lancets and mercury, is the token of their approaching second childhood; the prayer of senility.

We fear nothing from the returning wave. We shall have no occasion to erect a dyke to keep the coast from being overflowed. We of the Reformed School of Medicine, as the physicians of the people, first instituted the revolt against blood-letting and medical poisoning, a practice far more devastating and murderous than the army of Attila. We then were "a feeble folk," fettered by barbarous and unconstitutional laws; now we are stronger. Besides, we have powerful auxiliaries in the old school ranks. Trousseau, Bennett, Chambers and others have demonstrated the doctrines which we proclaimed, and their words cannot be gainsaid. The class of physicians

whom Dr. James L. Brown represents are able to keep the lancet excluded from the armamentarium till the old men are completely superannuated that are so eager to return to bleeding and to reinstate their shorn Samson in power.

But suppose the contest is renewed, and the Sangrados sharpen their lancets for the shedding of blood. The people themselves will be aroused as never before, and will speedily terminate their career, and with it their monopoly of all places of emolument, which they have sedulously held under the pretext of being "regular." Health officers, sanitary commissioners, examining physicians and others, will no longer be taken exclusively from their ranks. The rebellion was not more destructive to those who engaged in it than will this endeavor to restore the dominion of medical barbarism prove to those who make it. The fate of Henry Van Aernam is a swift witness that Old School prelacy, papal infallibility and proscription, are very aged, and about to sleep in unhonored graves, like Jehoram of Judah. They are committing professional suicide, and we are glad of it. They will not be obeyed, although like Joshua, they command the sun and moon to stand still.

Now that our medical Rip Van Winkles are awakening from their sleep of thirty years, we notice that they propose to make women, who are comparatively helpless, the subjects of their phlebotomy; perhaps from a consciousness that the men will not stand it. Those whom God has consecrated with the seal of maternity are first and principally the ones to be attacked.

Nature herself teaches better. If pregnancy is a disease or predisposes to disease, it ought not to be permitted to exist. If a woman in that condition needed to part with blood, her physical organization would have been so constituted as to provide for its excretion. But instead, as Cazeaux and others have shown, she requires more careful nourishing. The sentiment of Michelet, in *L'Amour*, that a woman is always sick, is a repugnant one to men who admire and esteem the female sex. We have little patience for the notion that women exist principally for the purpose of being doctored. Many physicians are subsisting almost entirely from practice among female patients.

Is this proposition to compel women to submit once more to blood-letting a fruit of the new-fangled science of gynecology? If so, it is important that this be understood. Of the unfortunate victims, the language of the Apocalyptical writer would then seem to be substantially true: "The devil is come down to you having great wrath, for he knoweth that he hath but a short time."

Mercury.

"He stops awhile the pulse to feel,
And then takes out his calomel."

The famous doggerel from which this caption is taken was one of the most expressive, most just and most convincing impeachments of the Old School Samson. It could not be answered; for in it was a logic of facts which was irrefutable.

We have no fear or reluctance to give honor and hearty acknowledgment to the rude man who thus opened war upon one of the most baleful agents ever employed by men for the professed purpose of curing disease. It is not the first time on record that an untaught, illiterate man has brought men of science to shame, if the Acts of the Apostles speaks correctly: "Now, when they saw the boldness of Peter and John, and perceived that they were unlearned and ignorant men, they wondered; and they took knowledge of them that they had been with Jesus."

The feather of the pen of Martin Luther jostled the tiara of the pope, because it opened up freedom of opinion and conscience to common men, and broke the authority of one man or body of men to mark out a line of duty for others. The doggerel and objurgations of Samuel Thomson, in an analogous manner, shook the iron despotism of "Old Physic," emancipating a people from the thraldom, and compelling an entire profession to shield itself and its abuses behind arbitrary statutes and a code of ethics the legacy of the dark ages.

Half a century passed away after Thomson had declared mercury to be a poison, destructive to the human body, and unfit to be employed as a medicine. It had not gone out of fashion to vilify his name; and many who rejoiced in his disclosures were still ashamed to acknowledge his real excellencies when, in the midst of the war of the rebellion the surgeon-general of the United States issued the following pronunciamento:

Circular No. 6.

Surgeon-General's Office,
Washington, D. C., *May* 4, 1863.

I. From the reports of medical inspectors, and the sanitary reports to this office, it appears that the administration of calomel has so frequently been pushed to excess by military surgeons as to call for prompt steps from this office to correct this abuse; an abuse the melancholy effects of which, as officially reported, have exhibited themselves not only in innumerable cases of profuse salivation but in the not unfrequent occurrence of mercurial gangrene.

It seeming impossible in any other manner to properly restrict the use of this powerful agent, it is directed that it be struck from the supply table, and that no further requisition for this medicine be approved by medical directors. This is done with the more confidence as modern pathology has proved the impropriety of the use of mercury in very many of those diseases in which it was formerly unfailingly administered.

II. The records of this office having conclusively proved that diseases prevalent in the army may be treated as efficiently without tartar emetic as therewith, and the fact of its remaining upon the supply table being a tacit invitation to its use, tartar emetic is also struck from the supply table of the army.

No doubt exists that more harm has resulted from the misuse of both these agents in the treatment of disease, than benefit from their proper administration.

W. A. HAMMOND,
Surgeon-General.

The man who promulgated this order was a man of thorough classical as well as professional education, a "regular" physician of "the most straitest sect," believing himself that there was a "proper administration" of the "powerful agent" other than as rat poison, and even now occupying a chief seat among the magnates of the Old School. He it was who thus confessed judgment. "No doubt exists," he declared, "that more harm has resulted from the misuse of both these agents in the treatment of disease, than benefit from their proper administration." True, too, every word of it. The soldiers had more to dread from medical treatment and found it more deadly than the bullets of the enemy. We remember well the consternation which that order created through the ranks of the Old School practitioners when the stern testimony was uttered against them. Not the masters of the girl from whom the apostle Paul expelled the spirit of Python, were more enraged, when they saw that the hope of their gain was gone, than were these men when calomel and tartar emetic were placed under ban. But how intelligent laymen did rejoice.

Mercury has been very convenient; like charity, it covered the multitude of sins; the sins which proceeded from the physician's ignorance. For years it was administered in pretty much every case.

As the irreverent Dixon expressed the matter, "suppose, for instance, that a person have an enlargement of the abdomen, and it cannot be ascertained whether it is caused by a collection of air, water, pus or fat, give calomel. If there be air, calomel is *anti-tympanitic;* if there is water, calomel is *anti-hydropic;* if there

is pus, it is *anti-purulent;* and if there be fat, it is *anti-steatomatous.*" For fever, biliousness, tic doloreux, diarrhœa, dysentery, diabetès, dropsy, dyspepsia, inflammation of any of the vital organs, it was the panacea. Inflammation was regarded as an over-supply of vitality, the most absurd notion that ever entered a man's head, and calomel was used for its reduction. It was considered "alterative;" and, we presume, correctly so. A brother of the writer, when a youth of nineteen, overworked during the hot season, applied to a physician for advice and was treated to calomel. A few days afterward he visited his medical adviser, and desired to be made as well as when he received the first prescription. That achievement was not attempted, and he never regained firm health. He lived but eight years longer. In this case calomel was indeed alterative; it made great alterations.

Our detestation of the villainous drug began in early childhood, and has strengthened all through maturer years. We never saw it administered without a feeling of deep aversion; and the results of its employment, as we often witnessed them, have confirmed the sentiment. Among these examples were cases of scarlatina made mortal, pneumonia aggravated to hopeless prostration, ordinary fever only mastered when chronic sore legs had become the sequence, a scrofulous infant drugged into idiocy, young men and women made weakly for a lifetime. If that is not quackery, charlatanism and imposture, then language is too feeble a medium to convey properly a vivid idea of fact.

We can multiply examples. We have mentioned the dosing of patients into idiocy and hopeless ill health; and, indeed, some intelligent Old School physicians will acknowledge that it is unsafe when the patient is scrofulous. Dr. Samuel H. Dickson, of Jefferson Medical College, Philadelphia, recommending its employment for the enlargement of the glands, makes use of the following expression: "Mercurials, which I object to and dislike to use, under all other conditions of scrofula, which I think rather tend to irritate and disturb a scrofulous constitution otherwise affected."

This objection is well founded. We have seen scrofulous children poisoned when the doses given were infinitesimal, and administered by a Homœopathic physician. As scrofula is a pretty widely diffused complaint, this fact alone would seem to be enough to induce intelligent and conscientious physicians to abandon its use. Another professor of the same institution once declared that if he had the last

pound of mercury in the world he would throw it away rather than suffer it to be used, so fearful had been the effects of this agent. Prof. N. Chapman, of the University of Pennsylvania, who occupied the chair of materia medica and therapeutics in that institution, after having practiced his profession for over fifty years, most of which time having been a lecturer in that college, expressed himself very strongly in regard to the use of mercury as a medicine; and his views, as expressed in the following extract, have been fully sustained by thousands and thousands of the most able and intelligent men of the age.

"If you could see what I almost daily see, in my private practice, persons from the south, in the very last stage of a miserable existence, emaciated to a skeleton, with both plates of the skull almost completely perforated in many places, the nose half gone, with rotten jaws and ulcerated throats, with breaths more pestiferous than the poisonous Bohon Upas, with limbs racked with the pains of the Inquisition, minds as imbecile as the puling babe, a grievous burden to themselves and a disgusting spectacle to the world, you would exclaim, as I have often done, 'O the lamentable ignorance which dictates the use, as medicine, of the noxious drug calomel.' It is a disgraceful reproach to the profession of medicine; it is quackery—horrid, unwarrantable and murderous quackery. What merit do physicians flatter themselves they possess by being able to salivate a patient? Cannot the veriest fool in Christendom give calomel and salivate? But I will ask another question: Who is there to stop the career of calomel when once it has taken the reins into its own possession? He who resigns the fate of his patient to calomel is a vile enemy to the sick, and if he has a tolerable practice, will in a single season lay the foundation for a good business for life, for he will ever afterward have enough to do to stop the mercurial breaches in the constitutions of his dilapidated patients. He has thrown himself in close contact with Death, and will have to fight him at arms-length as long as one of his patients maintains a miserable existence." Like mankind in the antediluvian world, it is so wicked that every imagination of the thoughts of employing it is "only evil continually."

Dentists in their way, are culpable, as well as physicians. Many of them display a reckless unscrupulousness, if not a shameful prejudice and ignorance, which cannot be too severely censured. They persist in plugging teeth with "paste," and "osteoplastic fillings," composed of amalgam, to the serious injury of their patients. The practice, to

be sure, is discountenanced in their associations, text-books and journals; but it is, nevertheless, as common as it is pernicious.

The same unscrupulousness leads them to persist in the employment of vulcanized India rubber, as a base for the insertion of artificial teeth. It is more than probable that physiological reasons exist against the use of India rubber in any form for this purpose. It seems to exert, in some peculiar manner, a mischievous influence upon the health and spirits. But in addition, the red coloring matter used to color the article is vermilion or sulphuret of mercury. Indeed, the material is called "rubber" merely by courtesy, for it consists of thirty-six per centum of mercury, twenty-four per centum of sulphur, all the rubber in the composition being the remaining forty per centum. We have known dentists to use the poisonous material, assuring their patrons that it contained no mercury or other noxious substance; yet men are now living in this city who have been compelled to lay rubber plates aside because of the mercurial disease which they communicated—ulceration, eating away of the tissue of the jaws and palate, etc. Sore mouth is a common occurrence when teeth have been inserted attached to such plates.

One dentist in this city declared, to a person so suffering, that he must have been salivated, and yet assured him in the same breath that there was no mercury in the rubber plate in his mouth. How men can lie so deliberately, or even regard themselves as honest or honorable when using such an execrable material, is beyond our power to explain. Indeed, very many dentists are quacks in their profession, and reckless impostors.

We can fill pages with testimonies of "regular" physicians in regard to its ravages; yet many physicians, and some honest souls among the laymen, are fond of assuring us that our reformed medication may answer in ordinary cases, "diseases having changed in recent years," but that mercury is sure to be required in severer or more complicated attacks. Dr. Dixon, however, has very properly explained how it is thus serviceable: "There is one valuable property in calomel above all other medicines, it is this: If there is nothing the matter with the person who takes it there very soon will be; and although before its administration it might be impossible to know or say what was the matter, if anything, it will be very easy to do both after it has been given. Decayed teeth, bad health, foul stomach, irregular bowels, pains in the bones, weakness and weariness are a small portion of a large catalogue of ailments which are most distinctly trace-

able to calomel. Dyspepsia, dropsy, and piles or fistula may be very easily procured by any one who will undergo a course of calomel."

This witness is true. The blue mass, iodide of mercury, corrosive sublimate and other compounds, which are also bad, are all of them equally mischievous in their way. Yet, if we are informed correctly, there are physicians called "Eclectics" who will acknowledge that mercury is actually necessary in extreme cases of disease. We do not know why they are called Eclectics; it is an error in the application of the term. The members of the new school of medicine never entered the field in behalf of hygienic and innocuous medication thus to sneak back and accept such a subterfuge.

A large per centage of intelligent old school physicians are discarding the drug. The *Medical Gazette* contains the abstract of a paper in the British *Medical Journal* of January 7th, 1871, to show the utter uselessness of mercury as a cholagogue.*

A man once called upon a physician for a prescription. The doctor weighed him out a quantity of calomel and told the clerk to put

* *Further Experiments Demonstrating that Mercury has no Special Action on the Liver. Experiments to determine how far Local Stimulation of the Gall-duct in the Duodenum increased the flow of Bile. —July 22d*, 1869.

The different mercurial preparations employed as a medicine were subjected to various processes, such as they might undergo when digested for a time in the stomach, with a view to their being applied to the orifice of the common duct in the duodenum. Thus:

1. Two blue pills rubbed down in an ounce of milk were given to a cat, which was killed an hour afterward. The stomach was ligatured above and below, and kept warm at a temperature of 100 degrees Fahrenheit for three hours.

2. Two blue pills rubbed down in half an ounce of milk, after mixture with a few drops of rennet, were allowed to digest in a water-bath for eight hours.

3. Five grains of calomel, in half an ounce of milk, were digested in the same manner for eight hours.

4. One grain of corrosive sublimate, in half an ounce of milk, was also digested in the same way for eight hours.

These various fluids holding, the digested mercurial preparations in suspension or solution being ready, a full-grown rabbit was chloroformed; its abdominal cavity, and then its duodenum, were opened, and the orifice of the common duct exposed and cleaned. Several drops of all these fluids were placed, at different intervals of time, on the orifice of the duct, but not the smallest quantity of bile escaped. There were then applied: 1, mechanical irritation, such as pricking the orifice; 2, acetic acid; 3, powdered calomel; and 4, corrosive sublimate. The latter caused great redness of the mucous membrane, but in no case did bile flow from the orifice.

The two poles of an interrupted electrical current were applied to the orifice without producing any effect, but when they came into contact with the diaphragm it was strongly contracted, together with other muscles in the neighborhood, and a gush of bile flowed from the orifice. This was repeated several times.

The bile-duct was most carefully dissected out in its middle portion, and isolated by passing the ivory handle of a scalpel under it. The poles of the battery were now applied to this portion of the gall-duct, but without causing any flow of bile.

The liver was now removed from the body, without, however, dividing the gall-duct which united it to the duodenum. The poles of an induction coil in action were applied to various parts of the liver itself, without causing any flow of bile. The interrupted current was sent through the gall-bladder in various directions without inducing the slightest contraction in it; but the same current

it up in smaller doses, when a neighbor rushed in hurriedly and asked for some poison for rats. He could not wait, and the physician gave him the "medicine" which had just been weighed out. The patient suddenly received new light. "I think that I am also in a hurry," said he, and he immediately followed his rat-infested neighbor into the street.

Meanwhile, to all who still love and cherish the memory of the old-time favorites, we have no desire to minister any other comfort than that given by Dr. O. W. Henry, in his poem "Rip Van Winkle, M. D.":

> "Sleep once more till thirty years come round,
> You'll find the lancet in its honored place,
> Leeches and blisters rescued from disgrace,
> Your drugs redeemed from Fashion's passing scorn,
> And counted safe to give to babes unborn.'"

applied to the stomach and the urinary bladder, caused in both of these hollow viscera strong contraction.

November 18, 1869.—In order to ascertain whether similar negative results were to be obtained in the dog, I requested my assistant, Dr. McKendrick, to repeat the local irritations in that animal. The following is the note which he furnished me:

"A male dog was chloroformed; its abdomen and duodenum were then opened, and the orifice of the bile duct exposed. A strong solution of common salt, a solution of corrosive sublimate (four grains to an ounce), dilute nitric and hydrochloric acids, and an interrupted current from an induction machine, applied to the opening of the common ducts, caused no flow of bile; but when the abdominal or thoracic muscles were thrown into contraction by the induced current, bile flowed freely from the orifice. The same irritant caused no contraction of the gall bladder, but produced powerful contraction of the urinary bladder." It results from these experiments:

1. That mercurial preparations digested in the stomach do not irritate the orifice of the common duct in the duodenum, or induce any flow of bile into it.

2. That no other kind of local irritation causes increased secretion or flow of bile into the duodenum.

3. That the gall bladder is not contractile, and that, consequently, no irritation, direct or indirect, nor any kinds of reflex action influence it.

4. That pressure upon the gall bladder or liver, in consequence of extensive contractions of the muscles surrounding these organs, causes a copious flow of bile into the duodenum.

In consequence of the demonstration of the non-contractility of the gall bladder, made in these experiments, I carefully examined the structure of this viscus in the rabbit, dog and man, and, contrary to what is generally supposed and taught (see Quain's Anatomy, seventh edition, p. 878), satisfied myself that it has no muscular coat.

The facts thus arrived at, it seems to me, completely set at rest the speculations which have been put forth as to the possible action of mercurials, by local irritation of the extremity of the gall-duct in the duodenum. They further show that, whilst neither mercurials nor irritations of any kind induce a flow of bile from the duct into the bowel, neighboring muscular contraction has that effect; a circumstance which confirms the well known beneficial influence of exercise and muscular exertion in certain bilious disorders.

The experiments now detailed conclude the inquiry into the action of mercury on the liver, and demonstrate that the opinions of those who cling to the employment of that drug, on the ground of its local action, are in no way better founded than such as have prevailed with regard to its constitutional effects.

A CRITICISM ON THE PLATFORM AND DECLARATION OF PRINCIPLES.

CONTAINED IN AN ADDRESS OF WELCOME TO THE MEMBERS OF THE THIRTIETH SENATORIAL DISTRICT ECLECTIC MEDICAL SOCIETY, DELIVERED JUNE 13, 1871.

BY ORIN DAVIS, M. D.

Fellow Members and Invited Guests.—In the name of my peers, I cordially welcome all of our professional brethren upon this occasion, and extend to them a courteous invitation to participate with us in the proceedings of the Thirtieth Senatorial District Eclectic Medical Society.

Since the time that we last convened in this capacity, the starry wheel of Zodiac has moved its half-yearly round through its spaces infinite, and we have all been subjected, journeying to and fro in our calling, to our usual severe winter experiences. Nothing has deterred you from promptly answering the summons of mortal anguish, leaving glowing firesides, and even equally comfortable beds, and hastily donning flannel and furs, gone bravely forth, encountering storm, cold and sleet, your beards being made whiter with other snows than those of age; your feet suffering and benumbing with cold, your hands as stones, while the sharp, frosty wind remorselessly

> "Curdles the blood to the marble bones,
> Tugs at the heart-strings, numbs the sense,
> And hems in life with narrowing fence."

Yet heroicly disregarding these painful experiences of our rigorous climate, with zeal burning in our hearts, steadily, faithfully and nobly served the profession and humanity.

To-day the season is propitious with sunshine, warmth and green verdure, with the music of birds and marvelous beauty of flowers, and the same good spirit animates you to come hither, not for the sublime purpose of announcing an important discovery, or solely for

that of bringing to light new remedies or newer methods of applying older ones, but for the equally important purpose of preserving our associated life and influence.

We likewise recognize that in the arduous personal experience of the physician, it is always beneficial, and sometimes absolutely necessary, that he unbends for a day and relieves himself of the tensity and stretch of thought and occupation in order to greater elasticity of body and mind. Then there is the additional enchantment of sympathy, which similarity of experiences awakens, and our social intercourse is enhanced by the interchange of thought and relation of interesting "cases," exceptional and rare, some of which are such marvelously digressive episodes, attended with unexpected lights or veiled in unanticipated shadows, that we are deeply and devoutly impressed, as with the mysterious presence of an unseen guiding hand, and affording us food for much study and calm reflection.

And, likewise, the discussion of various topics, matters of current progress, those treated in our literature, as well as those embraced in the range of practice and surgery, are of every day importance and interest to us.

Our hands have grasped in friendly greeting, and we look each upon the other's familiar face, if less radiant with ruddy youth or less flushed with bright animation, yet, certainly, growing more interesting and inspiring, contemplative and genial, under the artistic touches of age and ripening experience, blending in them traces of wisdom, the result of conflicts, struggles and all the varied and earnest vicissitudes of professional life.

Yes, with these delicate traceries of age and experience mingle whiter locks, and the old reaper, time, is waiting patiently, sickle in hand, to gather us, when fully matured, into his spiritual harvest.

Our thoughts now instinctively revert to those earlier times, when the future of this world formed in our minds a long, pleasing perspective of usefulness, honor and happiness; when we set sail in our professional ship, and ambitiously nailed to our mast, in flying, vaunting colors, the flag on which we inscribed "Medical Freedom and Enlightened Choice."

We have thus far stood by our colors. Those earlier ideas ripened into our purposes, the ideal which we have ever sought to realize, and whatever we have worthily achieved, has been inspired by the moral consciousness of right. To-day, medical eclecticism is dear to our hearts, not simply because it has brought to light so many

improvements, so many new and excellent remedies and so many beneficent features in practice, but because it is the representative of an important principle, essential to all genuine progress, to wit: *That of the individual right to exercise judgment and opinion in the freest manner possible;* and this school of medicine recognizes this right as necessarily essential to enlightened choice.

Because we are yet enamored with our first love, we feel intensely jealous lest this our living idol be taken from us, and some heavy leaden image be substituted in its place. I am not about to inflict upon you a dry homily on abstract principles, or upon medical ethics, nor yet to weary you with trite animadversions, critical or otherwise, upon other schools of physic. I am only going to ask you, familiarly, how do you feel about the preservation, in its purity, this tradition of our fathers, this unfolding germ of our prosperity, this enlightened choice, which we sustain as the living declaration of our principles?

In asking this question, I would not, by any means, manifest a captious or fault-finding spirit, but rather, I would include every one in the ample and generous folds of true charity. At the time we assumed the proportions and character of a State organization, of which this Society is one of its humble parts, it was eminently proper that we should put forth a code of ethics, frame a constitution, form by-laws, and make some declaration of our intents and of the principles which actuated us.

We are fully aware that all this constituted a great undertaking, and only those who have had ample experience in these organizing processes, can fairly understand and estimate the amount of labor it involves. To express in language felicitously, and to general acceptance, covering all of these topics carefully, with well conceived and thoroughly digested matter, improved critical and patient work, and an acknowledgment is due to our parent Society from its various filial branches for the merit and wisdom therein displayed, and the able manner in which it was accomplished. It therefore seems almost a fault to make this an occasion for friendly criticism in any of its parts.

Therefore, while we are in entire agreement in its main momenta of thought, manifesting breadth, largeness of liberality, and encouraging the freedom-inspiring spirit of investigation, we most respectfully invite your attention, for a moment, to a part of the newly revised,

Platform and Declaration,

just published in the yearly account of Transactions of the State Society for 1870. In this declaration, it must have been contemplated, as setting forth clearly and succinctly, the cardinal views and specific ideas ruling with its adherents. This declaration begins as follows:

"The life itself, the principle often called 'the healing power of nature,' is the sole force capable of removing disease and maintaining the conditions of health. The physician is therefore the minister and auxiliary of nature, and it is his vocation to know and apply remedial agents which conform exactly to the laws of life, and aid the physical system to relieve itself of morbid elements and recover the normal performance of its functions."

If this sentence had simply occurred in the annual address of one of its presidents, it would hardly be worth while to refer to it, but after it has received the careful attention and revision of a committee appointed expressly for the purpose of preparing it, and afterward is put forth as an almost authoritative announcement of our views, it ought at least to be examined.

Its ideas, I fear, are not happily expressed. Its representative thought or proposition is made too generally and expressed in such variety of convertible terms. To simplify the expression of its thought, as I apprehend it, from the language employed, it says, in effect: "*The sole force capable of removing disease is the life itself.*" Here *force* and *life* are convertibly expressed. It also speaks of life itself, as the *principle* often called "the *healing power* of nature. It also distinguishes between this force and "the conditions of health." If it be averred, however, that the life itself is not its force, but that that force results from the life, *that* then personifies the "healing power" as an entity, originating something, and actively doing something. And thus it *is* here fairly represented, for if we consider the words in their most obvious sense, it is that the life itself is the sole force capable of *removing* disease. And I hardly know how we can evade the pertinency of the question to which it naturally gives rise, that if life itself is the sole force capable of removing disease, of what further object is there in employing any other force? Why use other forces, if this is the sole one? Why resort to remedial agents under this precisely expressed view of the case?

Suppose that remedies do exactly conform to the *laws of life*, do they thereby lose their identity, transmute into life itself and become one of the equivalents of its force? We hardly think it is intended

to assert that they are the force itself. One is almost tempted to ask, if life is solely capable of removing disease, why meddle with it at all?

Is it not evident that in the above declaration, that the best words and terms are not suitably employed to convey a correct idea on this subject? Life does not simply represent a force, but many forces. We would by no means call in question the instinctive recuperative powers of nature; but we think it is not philosophical to express them as one sole force.

Neither do we think it suitable to our philosophy to represent disease as a foreign invader, and personify it as an intruder on which the force of life solely acts, as executing a writ of ejectment. Is it not only far more simple, but also both practical and philosophical to regard our bodies as subject to those changes and conditions which result in disease, and for this reason summon to our aid the kindly services of the physician, who may skillfully employ safe remedies to assist in changing these unfavorable conditions? If, however, the unassisted forces of life are fully adequate to the emergency of the disease, it is well, and the aid of the physician is not required. But if they are not, and claim the intervention and assistance of remedies to change worse conditions to more favorable ones, then we preserve to these agencies their *remedial* and *assisting* character, and they in these respects become useful agencies in the hands of the skillful.

Evidently, the postulate declaration under consideration, appears to the apprehension of some as axiomatic, a quite *self-evident medical theorem;* or otherwise the paragraph following it would hardly be warranted in employing the following language:

"*We accordingly reject*, as medicines, those agents or substances which are known to be baleful and poisonous in their character, having for their use no necessity or adequate justification, and exclude from our catalogue of remedies, wholly and unqualifiedly, bloodletting, the several compounds and preparations of mercury, antimony and lead."

"*We accordingly reject*," are the words denoting its relation to the first declaration, as a sort of necessary and justifying sequence following it.

This is not true as matter of fact, for nearly all of us believed in the baleful nature of these remedies long before this postulate was ever penned. The trouble with it is, that what the postulate takes for granted is not self-evident; on the contrary, it is not absolutely true; and what it implies, if true, is not well expressed. Its sequence is not

in good taste, for *we do not accordingly reject*, giving us the impression that it discloses some obligatory principle reaching out into every man's practice. This is most certainly contrary to the genius of Medical Eclecticism; for it requires nothing *mandatory* in matters of belief, and employs no associational force to make its views acknowledged and felt. It has always consistently opposed all attempts to set up any hypothetical standard, whereby we may be enabled to measure and determine by practice who are and who are not *regular* Eclectics; and this is the very thing which our sagacious cotemporaries in old physic have been doing and repeating from time immemorial, and we laughing at their ridiculous attempts to regularize and stripe their own sheep and keep them within the fold of orthodoxy.

The simple declaration is sufficient that we do not approve of hurtful and deleterious remedies, when it is in our power to offer better ones of a more congenial character; and it is in the kindliest and most trusting spirit that we look for that advance in professional knowledge, which will do away with the use of all that are by nature, even remotely, liable to injure the human constitution. Such a statement will harmonize most perfectly with the one already embodied in that declaration, happily expressed as follows: "*The art of healing, like civilization itself, is daily improving, expanding, and becoming more perfect.*"

Gentlemen, possibly no notice might have been taken of so trivial a matter as the faulty expression of a definition which might be construed as rather dictatorial in bearing and tendency. I am impressed with the idea that it was not so designed by its framers to be, and that they will also recognize its deficiency, change its wording and give us a declaration more in keeping with the genius of charity and scientific progress. Mine is not an unimpassioned interest, that coolly looks on ready to magnify mistakes; on the contrary, I have ever felt assured that there is something irresistible in the progress of enlightened choice, having education and all science for its natural ally, increasing in depth, breadth and velocity, not unlike the swelling river in its flow to the ocean. One may stand upon its banks and rivet his gaze upon a swift circling eddy, and possibly think that within its narrow limits the movement of the river is greatly impeded; whereas, if he is himself borne on the bosom of its ever onward flowing tide, these little deceptive eddies will most quickly disappear.

All, no doubt, feel mutually the great desirability that our medical

practice, assuming and putting forth the character and manly proportions of a State organization, should be careful in its matured expressions; especially so in respect to our early traditions concerning individual freedom and enlightened choice. We would more cheerfully manifest our entire approval if we lay on one side all that squints at any possibility of associational dictation; even these seeming appearances, wearing the cheap shoddy suit of sciolism or puerility, and disclaim faith in every and all hypotheses whose support exacts our assent to their propositions. Let us not lay down special side-tracks for the train of progress to run on. Let all truth stand or fall on its merits. We would foster education, and this is possible only as we preserve the choice and freedom of mind. We want for its nourishment none of the dried and hard concretions of the past, useless as they are old; but we want the succulence, the fresher vitality of the present, with the spice and flavor which contributes so essentially to its nutrient activity.

Eclectic medicine emphasised the advent of medical freedom, and it has been a marked era of progress. What we contended for twenty years ago was bitterly opposed by the dominant school of physic. Blood-letting was then alarmingly prevalent, and was their sheet anchor; but what is it now? Mercury, in some form of preparation, then distinguished their practice, with sore-mouthed, fetid-breathed, loosen-teethed patients. Now we almost daily witness them substituting the active principles of plants, which long have been the Samsons of our practice. Water gave these inveterate unbelievers a sort of therapeutic hydrophobia then; now water-dressing in surgery is both fashionable and popular, and they are rapidly adopting our improvement, claiming them as actually their own by priority of discovery. The laws of affinity overrule those of artificial interest. And as they lay one side those old school marks, the harsh, heroic and life-endangering remedies, they likewise drink in more largely of the true genius and poetry of humanity's self, and, unconsciously, more and still more, blend in spirit with us, in loving and sustaining that ideal always essential to all true progress, *Enlightened Choice;* which, in acting best and noblest, must be unbiased by party interests and constraints, and serve us in the fullest enjoyment of the liberty of truth. Then may we eventually be constrained to acknowledge that all meritorious discoveries and all medical progress, whether the result of the inspiration of genius, or of the more solid attainments of science, belong not so much to any particular school in medicine as to the common inheritance of our humanity.

NEURALGIA.

AN ESSAY READ BEFORE THE ECLECTIC MEDICAL SOCIETY OF THE CITY OF NEW YORK, AT ITS REGULAR MONTHLY MEETING IN OCTOBER, 1870.

By Alexander Wilder.

A malady, now foremost among those which afflict human beings in civilized countries, is the pest formerly termed *tic douleureux* and *tic convulsif*, but now generally known as neuralgia; a compound of two Greek words, signifying nerve-ache. It has been known ever since the time of Hippocrates. Its principal seat is in the first, second and third branches of the fifth pair of nerves, and the *portio dura*. The left side of the head or face is more liable to attack than the right. Every part of the body is liable to attack, but the face is the chief subject. We may have cerebral, spinal or ganglionic neuralgia. It is more common among women, although persons of both sexes will recognize in it a "mutual friend." It is produced by miasma, atmospheric changes, Schneiderian catarrh, erysipelatous disease, bad teeth, bad digestion, mental excitement and anxiety, and other causes too numerous to mention. A scrofulous diathesis is doubtless its original source, or a suppressed eruption.

The trifacial nerve, where the malady usually has its seat, is familiar to the anatomist. It arises by two roots from a tract of yellowish white matter in the front of the floor of the fourth ventricle. It passes forward into the petrous portion of the temporal bone, where it spreads into the *Gasserian ganglion*. This ganglion divides into three main branches, the ophthalmic, the superior and the inferior maxillary. The first of these gives off nervous filaments, denominated the frontal, lachrymal and nasal, besides other fibers to parts surrounding the orbit. The superior maxillary passes forward, and leaves the cavity of the skull through the foramen rotundum. It leaves the spheno-maxillary fossa, passes through the canal in the floor of the orbit and emerges at the infra-orbital foramen, where it

divides into branches to supply the nerves and integuments of the face. This nerve gives off in its course, orbital, dental, muscular and cutaneous branches. While crossing the spheno-maxillary fossa it receives two ascending branches from Meckel's ganglion, by which branches the nerves of the face communicate with the great sympathetic tract. The third, or inferior maxillary, leaves the skull by the *foramen ovale*, and divides into internal and external branches; the first gives off four or five filaments, which are distributed to the tempero-maxillary region, consisting of the masseter, temporal, buccal, etc.; the internal divides into the gustatory, inferior dental and anterior auricular.

There is no nerve of sensation, the activity of which is so frequently called into play, as the trifacial; the number of filaments at its point of insertion, authorizes us to believe that its connections with the brain are more intricate and extensive than those of other nerves. Hence sympathetic affections are easily and frequently excited in this nerve, which are often difficult to distinguish from genuine neuralgia.

When the first branch of the fifth pair of nerves is affected by neuralgia, the complaint is usually denominated *sick headache;* when the facial portions are disordered, the affection is *tic douleureux;* when other nerves of the stomach are assailed, the disease is *gastralgia* or *gastrodynia;* when the disease is in the nerves of the heart, it is known as *angina pectoris;* elsewhere it is named by the locality, as *sciatica*, *neuralgia mammæ*, *neuralgia pedis*, etc.

The symptoms are very numerous, and would, of themselves, exhaust the patience to think of them. The principal are throbbing or lancinating pains, following the course of the nerve; spasm of the eyes; involuntary weeping; anguish; despondency; confusion of ideas; desire for firm pressure on the head, which will suspend the paroxysm while it is continued, etc.

A neuralgic patient is generally prostrated, and his will enfeebled by his sufferings; desiring others to will, think and act without troubling him. A crazy person is often mischievous and malicious, but the neuralgic patient is not.

In the month of March, 1847, the writer was returning from an excursion into Cayuga, Cortland, Chenango and Madison counties of this State, when he was attacked with violent pain in the upper jaw, on the right side. The cause was periosteal inflammation at the socket of the bicuspid. He had suffered from it before, obtaining relief by a mode of surgical treatment purely original with him.

This time he decided upon the removal of the tooth. The pain of the operation was unusually severe and protracted, owing to the inflammation; and the fang of the tooth was of a dark brown tint. Regarding this as the last of his troubles, he neglected taking any special care of himself, and soon became involved in several matters of perplexing business, by which his mind was much disturbed and exercised. A relative, wishing his aid, he engaged for several days in work in the woods, sawing logs. The weather was cold, and snow covered the ground. A heavy storm finally set in, and it was not long before he was compelled to desist from employment, and take care of himself.

The only medical adviser at hand was my brother, then a student. He declared it a case of influenza, which was then epidemic. I differed from him and expressed the opinion that it was neuralgia. My conviction was intuitive; it occurred to my mind to say so as he was speaking; but there was not long wanting a heavy pain in the left temple, which steadily increased in intensity, and removed every doubt as to the nature of the malady.

Being partial to the water-cure treatment I wished to employ it, but was over-persuaded. My brother gave me a Thomsonian "course of medicine," to which I was very repugnant. It gave no relief, but seemed to add to the agony which had now become excruciating. Lobelia, in "broken doses," afforded some mitigation. The remembrance of that week, even now, makes me shudder. Every instant, as the arteries pulsated, the terrible pain throbbed along the left facial nerve; the ear became deafened, and the left eye, flowing copiously with tears, was presently inflamed as with the sting of a bee; there remained only the consciousness of my own agony. Weary days and sleepless nights were appointed to me.

The roads had been blocked up by the storm, and it had not been practicable to obtain medical advice. A physician, Dr. A. Wood, finally was summoned, and managed to break his way to the house. My first appeal to him was inspired by my torture. I entreated him not to burn me up with capsicum, and he obeyed my wish. I apprehend, however, that he found my case a stubborn one, or that I was too much worn down for very decisive treatment. He was a man who would err only on the safer side. He administered an anodyne, which for a short period mitigated the pain. But his other medicines for the next twenty-four hours failed utterly. The most important ones were not administered promptly, as he had directed, and it may

have been that there was difficulty in arousing the functions to proper activity.

I remember well one of those fearful nights. I had lost the clear knowledge of my own identity and imagined myself to be another person, an outcast, in a wilderness, perishing and at the last extremity. A few faithful ones, I fancied, were by me, who had forsaken the society of men, to share my exile and alleviate my condition. Gratitude for their fidelity was now active in my mind, and regret that I could make them no adequate compensation. But I besought them, as I bade them a last adieu, to take from me whatever valuables I had, for nobody would henceforth care for them as they had cared for me. And all the time that terrible pain darted every moment over my temple into the eye and jaw, each throb seeming more fierce than the one that had just preceded. The day finally dawned, and I recovered my right mind.

Thus six days and nights passed over my head; days and nights of sleepless, unremitting agony. The medicines had accomplished no satisfactory result. The physician redoubled his endeavors. Apocynum was his principal remedy. The throbbing began to lessen in severity; success was obtained at last, and I slept. Very tedious was my convalescence. For many weeks I was tormented by a stinging sensation along the track of the affected nerve, which I relieved by binding snow upon the brow and left side of the face. At length a boil appeared on the forehead; and when it had discharged its contents the complaint seemed to have passed away. But for many years the sense of hearing in the left ear was greatly benumbed; and there was also a blur on the left eye, to keep fresh in my mind the remembrance of that terrible week, and almost to writhe again with its fearful torments. The route of the inflamed nerve can now be traced over the forehead by the callus along the tract.

Since that time I have had two recurrences of neuralgia, once in 1853, and again in 1856. The former attack was at the left side of the face, downward from the ear. Its severity was relieved by a topical application of chloroform, but the socket of the jaw remained sore and inflamed. I applied to Dr. H. H. Cator, a Homœopathist, who administered kalmia latifolia, the high dilution, which removed the difficulty. It returned with a cold, which was contracted some time afterward, but yielded again to the kalmia. I have never since heard of any physician who used this medicine. The next time that

I was attacked the part affected was just above the left eyebrow. The treatment was of my own desiring and was effectual. It was a cold night in March. I swallowed two grains of opium, and then equalized the warmth of the body by prolonged immersion of the feet in hot water. Then retiring to bed, I swallowed thirty drops of chloroform, and quieted myself immediately afterward by inhaling the vapor. Whenever I awoke during the night I was bathed in sweat and thirsty. Brandy and water was used for this. The next forenoon I arose and dressed myself, entirely rid of that attack. I am not rugged; my temperament is very irritable, and my nervous system is exquisitely sensitive, but I have not since had a recurrence of these attacks of neuralgia.

So varied are the manifestations of this complaint that pathologists have been more or less at fault in its description. Thus it is indicated at times by furred tongue, loss of appetite and costiveness, and, again, only by the pain itself. It occurs most generally in persons of asthenic condition, or whose powers are broken by advancing years; yet, in the example just given, the attack took place in the earlier period of life. Persons affected with rheumatism are most subject to it, and, indeed, it is properly classed with rheumatic affections. It is apt to attack individuals living in a marshy district; and curiously enough is then most successfully managed by treating it like fever and ague. Sulphate of quinia, bromide of potassium, and even arsenious acid will control the manifestations. Persons attacked by it often seem to be also liable to apoplexy; and Dr. Pemberton, of England, when at the zenith of his reputation, was compelled by neuralgia to abandon his profession, and died afterward of the other complaint. In his case the frontal bone was found to be unusually thick, and on the fulciform process of the dura mater, at a little distance from the crista galli, a small osseous substance was discovered nearly half an inch long and almost as broad. Indeed, neuralgia is often found to be connected with an unhealthy condition of the bones of the head or face. A suppressed eruption of the skin.

Mr. Abernethy was generally most successful in treating it, by directing his attention to the condition of the stomach and bowels. It was his impression that neuralgic patients had a disordered nervous system, and morbid condition of the digestive organs. In his peculiar manner he used to say: "The two are the common parents of a numerous progeny of very dissimilar local diseases. In tic douloureux you must seek to put the digestive organs right, or to soothe the

nervous system, according as the one or the other may seem to be the principal and primary cause of the disease. Take away one of the parents and there will be no more propagation."

"There is a kind of face-ache," says Watson, "which cannot properly be reckoned as a species of neuralgia, for it does not occur in short stabbing paroxysms, nor is the pain acute enough to entitle it to the name of tic douloureux; but which is very common, very distressing, and under ordinary treatment, sometimes very intractable. It is called by some a rheumatic pain; it occupies the lower part of the face, the jaws principally, and the patient cannot tell you exactly whereabouts it is most intense. It is often thought to proceed from toothache, and bad or suspected teeth are extracted, but with no good effect." His remedy for this form of attack, was the sal ammoniac or chloride of ammonium, given in half-drachm doses, three or four times a day. It generally gave relief after four doses; but if it failed by that time, no benefit is to be expected. He also found iodide of potassium, in doses of five or six grains to work a speedy and permanent cure.

Indeed, medicines of which chlorine, iodine or bromine is an element, have been found very successful in neuralgia. Aqua regia, or chloro-nitric acid diluted, has been regarded by many as a specific. The Old School practitioners have depended on calomel, itself a chloride; although, as Watson shows, and as we have found in alvine diseases, the sal ammoniac was equally beneficial. Carbonate of iron has been employed with advantage. But we suspect that a patient will "wear out" any medicine which may be used; and hence, that a new remedy is advisable on the occasion of a fresh attack.

It was often the practice to sever the affected nerve, to dissect out a piece; but the relief was not radical. Many practitioners, even now, depend upon medicines and applications to deaden the pain, till "nature can effect a cure." Opium and all its preparations, hyoscyamus, colchicum, conium and every other known sedative, has been administered for the purpose; and ether, aconite, chloroform in turns have been applied to the surface to benumb the affected nerve. It is far better to use them than to suffer the terrible pain; but there is a more excellent way.

Abernethy was right; the disordered condition of the nerves and of the digestive system occasion neuralgia. Catarrh, influenza and kindred maladies, having different names, are also thus caused; and they all are prone to run into neuralgia. One mode of treat-

ment will cure them all. Relieve the alimentary canal of its contents, by apocynum, rhubarb, compound stillingia alterative or other mild cathartic, adding the bi-carbonate of soda to the medicine; and follow this by a tonic—sulphate of quinia, salicin, some preparation of cohosh, golden seal, or cypripedium, or whatever tonic is acceptable to the patient. Let special pains be taken to set the skin into healthful activity, as this of itself will remedy the entire evil. Much exercise in the sunshine is also important. Neuralgic patients are too much in the shade, and in miasmatic, scrofula-breeding atmosphere. The hydrate of chloral is the modern panacea, but it should not be given till the bi-carbonate of soda or another antacid has assured a fit condition of the stomach. In acid conditions chloral is often almost inert. Judiciously administered, it cannot be prized too highly.

There are scores of remedies as efficient as what have here been suggested, and a good physician needs to know them all. It is important in his treatment not to let the functions remain sluggish, but to rouse them by some variety of stimulus. He should also know the prophylactics, so as to be able to teach sensible patients how to use them. There are coming generations to whom we owe some obligations, and let us leave them some other legacy than faceache, gastralgia, sciatica, hemicrania and the kindred tortures which enfeebled digestion and irritated nerves are sure to entail.

CHOLERA: ITS CAUSE AND TREATMENT.

CONTRIBUTED FOR THE ECLECTIC MEDICAL SOCIETY OF THE CITY OF NEW YORK.

BY THOMAS R. FRASER, M. D., HALIFAX, NOVA SCOTIA.

Having been several times interrogated as to my method of treating Asiatiac cholera, I propose, in this paper, to submit my views of the malady, its causes and modes of diffusion, as essential to a critical and thorough knowledge of the subject.

First, allow me to draw your attention to an important point: I find the main or only difference between popular scientific views or theories and my own, of both cholera and steam boiler explosions, as noticed in that paper, originate from my taking one step further back, to examine the nature of the material and its action on other material, in their different positions. That action appears to me to be what is generally called "chemical." I see it more clearly as a magnetic or natural action; and as such it exhibits or explains to me what is called "spontaneous action;" or, that matter according to supreme arrangements exhibits the power within itself of acting, dissolving and reproducing.

The action of that power in matter may be seen to be the cause of all natural phenomena.

Thus the explosion in the thunder-cloud from the compounding of gases (without fire or pressure to ignite), is similar to that explosion in the steam boiler, as explained.

They believe in the universal necessity of having seed as the only nucleus to produce vegetation, and that vegetation will not form or grow without the seed. They appear not to notice that the spontaneous or natural action of that seed can only be when it is in a favorable position to reproduce, and that "The earth bringeth forth fruit of herself; first the blade, then the ear, after that the full corn in the ear." Thus also with disease, without doubting or disputing popular views of vegetation from the seed, or of the contagion or

infection of various diseases, or of miasma, or diseases being hereditary. But seeing matter to have that chemical or magnetic power and action within itself, I notice that action as the cause producing disease or producing miasma, and predisposing animals for that contagion and infection; thus also it points to the remedy.

In proof of that, I will give you part of a journal of one of the passengers of the steamer "England."

It appears to me to show clearly how the disease was generated on board that ship, by the passengers themselves being confined to their own atmosphere, thus producing miasma.

Copy of journal kept by a passenger on board steamer "England." The journal is not completed. It is supposed that the writer died on shore, as the original was picked up on the beach:

On board steamer "England," Wednesday, March 28th, 1866.—I came on board to-day; we left Liverpool at 5 P. M.; had fine weather; head wind.

Thursday, 29th.—Fine weather and comfortable; we arrived at Queenstown at 5 P. M.; taken on board five hundred Irish. * * * I never saw such a rough set in my life; we came down very well; had plenty of room, had they not taken any more after we left Liverpool.

Friday March 30th.—My dearest wife, this is the scene; I believe nearly all on board are sick; there was never such a sight seen before; men, women and children sick and lying about; it made me sick to see it. My only dearest, I never spent such a Good Friday before, I shall ever remember Easter week, 1866.

Saturday, March 31st.—I am recovering of my sickness; the weather is very squally and inclined to be rough; there are a great many sick to-day, but, thank God, I am better; I have been thinking a great deal about you to day, how you might get on. * * *

Sunday, April 1st.—The weather to-day is very rough, and there are more able to go on deck. I can assure you it is very disagreeable for so many of us to be confined below; the stench is so great that I can scarcely live in it. * * * * * My dear wife, did I not think of you this afternoon? I thought if I was home with you and the little dear children, by a snug little fire, I would never leave you again; but, never mind, I must cheer up, hoping it is all for the best.

There is a regular assortment of passengers on board this ship; there are Dutch, Germans, Greeks, Italians, Fins, Scotch, Irish and English. I don't think we can muster one hundred English altogether. There are six Cornish men, but only one that I knew in England, and we are very familiar with one another; and it is very amusing to hear them gabbling like a lot of geese and not able to understand one word they say.

Monday, April 2d.—Thank God, I am well and quite hearty again, but I hear that there is some sickness on board, and the weather has got calm and pleasant, and we are getting on very well.

Tuesday, April 3d.—My ever dearest wife, we are in a state of terrible horror; the rumor is that the cholera has broke out on board. Since yesterday there were three deaths, but, thank God, the weather is beautiful and fine.

Wednesday, April 4th.—Thank God I am still well, and never was heartier in my life. There has been three or four deaths to-night, and the weather is still beautiful.

Thursday, April 5th.—My dearest wife, I can assure you we are now in a state of horror. The captain has altered his course; he is going to put into Halifax instead of New York, that we may be landed three or four days sooner. There has up to this time been thirty deaths and one birth."

Friday, April 6th.—Thank God, the disease seems to be abating to-day. The weather here is very cold; we have been passing some islands (ice) to-day; that shows we are in cold climate. My ever dearest, I cannot explain to you the terror which we are in, that has any sense; to hear of so many dying around us and we cannot get away from it; but there are hundreds of people here that don't take more notice of it than if nothing had ever happened; but I hope, by the help of God, we shall be landed somewhere by Sunday.

Saturday, April 7th.—My dear Sue, I am thankful to the Almighty that I am still spared and very hearty, but have a very bad cold.

The ship arrived in Halifax on the 9th. The foregoing appears to show the cause for the disease in the steerage to be the atmosphere being polluted, or converted into miasma by the passengers themselves, and the fine and cold weather affecting the disease, as we have no account of it in any other part of the ship, and there is no complaint of weather, provisions or anything, except their position and the state of their atmosphere. The remedy adopted to remove the disease from the ship, was to place the people on shore in a different atmosphere, and restore a healthy atmosphere to the ship by cleaning and fumigating. They thus mechanically altered the position of material, and induced its natural or chemical action, by which means the change is produced and disease disappears.

From this I find the treatment of that disease should be similar to that adopted for the ship; yet the reverse is generally recommended; that is, medical men generally endeavor to check the evacuations of stomach and bowels. Whereas it appears to be preferable to encourage them by the free use of warm water internally and externally, until the injurious material is all thrown off; warming the extremities and abdomen with flannel wrung out of hot water, and well covered with dry blankets; then give freely as a stimulant about half a drachm of a mixture of equal parts spirits of camphor, laudanum and Hoffman's anodyne to a pint of sweetened

warm water. (The use of water is forbidden.) Cold water is injurious and dangerous in many cases; "lukewarm," or tepid water, abundantly and freely, I believe to be beneficial or medicinal in most or all cases. If there are cramps or pains without evacuations, apply hot, wet cloths and drink warm water freely to induce discharge of the stomach. If the patient is cold, an emetic of ipecac; if heated or fevered, tartar emetic [?]; also injections to induce purging until the pain is removed; then administer the stimulant.

I will now add a few words in reference to the *cause* of the disease. The "foul" atmosphere from the passengers (as per journal), being of the same material as that of their bodies and of their breath, *forms their miasma* by its ceasing to act chemically, or to neutralize or absorb the gas emanating from them; thus checking the force or life action, inducing it to become stagnant; the circulation is then thrown back into the stomach and the body becomes impregnated with its waste material that should have been thrown off. Thus, that stagnant and reverse action in the system induces disease, which nature endeavors to remove; hence the requirement of administering the emetic and injection to relieve; and then to restore the natural action by the stimulant and a cool, mineral atmosphere. To more fully understand that chemical action, productive of disease, I will draw your attention to a few facts connected with gases and the atmosphere.

An article in the "Druggists' Circular," of May 1st, 1865, on ozone and autozone, appears to me an additional proof to what I formerly gave you, of oxygen being similar in its nature to vegetable, and hydrogen similar to mineral, matter; the reciprocal action of those gases, oxygen and hydrogen, or vegetable and mineral matter, appear to be what is called chemical action.

The article says: "We understand that Schonbein has at last been successful in his long endeavors to isolate the bodies of which he has contended that ordinary oxygen is composed. Autozone, it is said, has a lower specific gravity than hydrogen; it liquefies at a pressure of 150 atmospheres. Ozone is a denser gas. The two gases combine with a loud explosion when exposed to the active rays of the spectrum. Another curious fact mentioned is, that a spark of positive electricity does not effect their combination, which is only determined by a negative spark. If confirmed, this is, without doubt, the greatest chemical discovery ever made; and we shall present our readers with the memoir as soon as we can obtain it from Munich; to the

Royal Society of which city, the author has communicated his discovery."—*Chem. News.*

Ozone, it appears, is a gas or emanation thrown off by the vegetable and animal when in life. There is also a gas, vapor or emanation observed from mineral magnets when in connection with a magnetic (decomposing) battery; also a vapor or emanation from hot iron, from decomposing minerals and from all decomposition. A gas is observed also from swamps, bogs and dead animals, which gas is commonly called *miasma.*

Those gases must be of the same material as that from which they emanate, and appear to afford sufficient evidence that, as the earth is composed of mineral, covered principally toward the equator, with animal and vegetable matter, and the whole saturated with water, composed of oxygen and hydrogen, *it* (the earth) must have its gas or emanation, composed of those materials, continuously thrown from it; and as mineral magnets have their emanations and *force* from the poles, and comparatively none from their equator, so the earth, as a mineral magnet has its attraction, force and mineral emanation from its poles, as may be noticed in the attraction of the needle, and the polar cold mineral winds. Those emanations from the poles coming in contact with the animal and vegetable emanations toward the equator; exhibit and cause by their reciprocal, chemical, or magnetic action, all atmospheric phenomena, and supply animal and vegetable matter with their atmosphere and water, as the result of that action.

The "curious fact, mentioned, that a spark of positive electricity does not effect the combination of the gases, which is only determined by a negative spark," I believe to be only apparently so; and it can be explained or made clear, when we notice *that spark* of electricity to be *merely an effect*, produced or caused by the action from *both poles* of the battery, *when coming* in contact, either of themselves, or through the medium of a "conducting" substance, and thus exhibiting the spark or electricity which cannot be produced without the reciprocal action of *both* poles. The spark or electricity is thus the *result* of the force generated by the decomposition of the metals in battery form, and may be seen to be so, better or plainer than described. Thus the flash, electricity, from the cloud, is the result of the action of those gases within or belonging to the cloud, when it comes within the attraction of a body connected with the earth.

Gases are controlled and act by the law of osmose, which is a form of the law of gravity or attraction in atoms; thus the power,

magnetism or force of atoms, is exhibited in the action of gases and liquids.

As there are a variety of minerals and also of vegetables, they combining reproduce and supply the animal and its variety. They must all produce a variety of gases and thus a variety of the atmosphere, adapting it to each animal and vegetable, as may be noticed in climate. An atmosphere composed mainly of ozones or gases not adapted, by being similar to the emanations and exhalations of the human species, produces what is called *miasma.*

Professor Dunglison in his Medical Dictionary, says of miasma: "The word is used more definitely for any emanation either from the bodies of the sick, or from animal and vegetable substances or from the earth, especially in marshy districts which may exert a morbid influence on those who are exposed to its action, * * * of the miasms which arise either from the animal body, or from the most unhealthy situations, *we know chemically nothing.* All that we do know is, that under such circumstances, emanations take place capable of causing disease in many of those who are exposed to their action."

May we not know something of the chemical action of miasma, when we find disease is produced in animals that are confined to an atmosphere similar to the emanations from their bodies, and that from the action of their food, which thus forms their miasma; and that animals living in an equatorial latitude require more mineral in their food to induce chemical action, by the vegetable atmosphere coming in contact with their emanations, and their inhalation acting on the gas from their food, thus keeping up its healthy life action.

Salt, as mineral, is known to be a medicine and necessary with food in an equatorial latitude or climate, and injurious in a polar climate.

So animals in a polar latitude require a vegetable and fatty animal food and less mineral, to induce the same action with the mineral cold atmosphere.

Thus, vegetables thrive and are healthy in their own atmosphere, as they have their food or nourishment from the earth; so is vegetable life checked by the polar cold mineral winds. The cholera or disease, likewise, is believed to have been caused on board steamer "England" by the people being confined to their own atmosphere, which thus produced miasma.

Hydrogen and oxygen gas brought into contact with each other produce similar effects to those from the combination of vegetable

and mineral gases or matter; hence, water composed of oxygen and hydrogen act as a medium for producing that chemical action with mineral and vegetable.

I have thus endeavored, without wishing to speak presumptuously, to furnish some views of the treatment which you wished explained, and also of the cause of the sickness under consideration.

I may differ with medical authorities, but have seen no attempt from them at an explanation of the cause of disease, which is supposed to be inexplicable and thus mysterious, as is also chemical action by our chemists.

In those views I am influenced by my own observations of that magnetic action, in its various positions as connected with the mineral, vegetable and animal kingdoms, with the earth and atmosphere, and by practical experiments as touching its connection with the cause of phenomena.

I do not attempt to dictate, but would invite investigation on a question of general interest and importance; particularly on a subject admittedly so beset with doubts and difficulties.

PERTUSSIS.

REPORTED AT THE ANNUAL MEETING OF THE ECLECTIC MEDICAL SOCIETY OF THE STATE OF NEW YORK, JANUARY 26TH, 1871.

By Harmon Pease, M. D., Schenectady, N. Y.

Among the many diseases to which children are subject there has been none more difficult to manage than pertussis, or hooping-cough. This ought not to be, for its pathology is well understood. We know that it is produced by contagion, and its presence is characterized by the secretion of viscid matter or phlegm within the bronchial tubes, trachea and fauces, which is expectorated with great difficulty. Hence it has been treated from time immemorial with emetics, astringents and expectorants; and, to cap the climax, among the Old School profession, the general opinion is that it must run its course. There appears to be no difference of opinion between us and them in regard to the cause or symptoms; all are well defined and unmistakable; but to the usual treatment we must take exceptions.

Pathologically considered, we find the facts to be as above stated; the bronchi, trachea and fauces affected with a specific poison, which produces a local inflammation, the effect of which is to cause the secretion of a glary, tenacious and viscid phlegm from its membranes.

Expectorants increase secretion, and, if too long continued, must weaken the organs from which come the fluids, on the same principle as the action of a poultice, if too long continued, will resolve and destroy the surrounding integuments.

Among the various symptoms of pertussis we also find an unequal circulation produced by its convulsive and spasmodic action. Now, what shall constitute the natural treatment? If we understand the cause to be a poison of a specific nature located upon the organs affected, then our course of treatment is plain. Who would for a moment think of giving ipecacuanha, squills, or other expectorants, in a case of diphtheria, which is well known to be the result of a specific poison,

requiring at our hands the most powerful disinfectant and antiseptic remedies. It must be similar in the treatment of hooping-cough.

To be successful we should use remedies that will meet the cause and neutralize the local poison, otherwise we will not succeed.

The following course of treatment I have found to be the most successful in hooping cough:

℞.	Carbolate of Glycerine,	
	Acetic Acid,	
	Laudanum,	*aa*, ʒ j.
	Water,	℥ iij.

To a child give from half to one or two tea-spoonsful at a dose, according to age, every three hours. This remedy will not only lessen the fever and neutralize the poison, but will check the accumulation of phlegm in the fauces, consequently moderating the frequency and severity of the cough. I also apply spirits of turpentine to the throat at least twice a day. The nervous system should not be overlooked. In hooping-cough, as well as in epileptic fits, the bromide of potassium will be a most potent remedy to overcome the convulsive and spasmodic action; add two drachms to four ounces of water, and administer for a dose one tea-spoonful three times daily. The physician should be the judge when cathartic medicine is necessary, and if such is required, Husband's magnesia, combined with citric acid or lemon juice, is pleasant and effective.

This mode of managing hooping-cough has proved in my hands more successful than all other treatment combined, relieving the sufferer in a short space of time, and, when continued, completing the cure sooner than any other method yet known.

A REMARKABLE CASE OF NERVOUS DISEASE.

Reported by J. Morrison, M. A., M. D., M. C., P. & S. ONT.

I have been induced to report the following case for the purpose of showing the obstinacy with which some affections of the nervous system seem to resist all treatment, and of ascertaining the opinions of others with regard to it.

Mr. McM—— æt. thirty-seven, married, the father of several children, was seized, about six years ago, with a "dull, heavy" pain in the top of the head, at or near the junction of the sagittal and coronary sutures. The seat of pain occupies a space about two inches in diameter. The pain has never ceased during the last six years, and is increased by bodily exertion, or mental or emotional excitement. Accompanying the pain in the head, there are tinnitus aurium and a stiffness in the upper cervical vertebræ. The pulse has for some years averaged eighty-five. There is considerable congestion of the face and neck. The scalp is exceedingly tense; but this may have been produced by the blisters and alcoholic lotions which he used. The patient is very easily agitated; the slamming of a door or any unexpected noise near him, causes him to start suddenly, and also, at the point of falling asleep he often experiences slight shocks similar to that produced by a slight discharge of electricity. He has suffered from dyspepsia, and has had symptoms characteristic of gastric ulcer; but of the existence of this latter I now entertain some doubts. The urine is slightly albuminous and highly charged with phosphates. There is considerable tenderness in the region of the kidneys. He has had involuntary seminal emissions *since the pain in the head began*, and for which he had the prostatic portion of the urethra cauterized with Lallemand's porte caustique. He experiences, however, no difficulty in the sexual act, although the emissions occur *without* erections and accompanied by dreams. The seminal emissions have not been produced by any excesses committed either before or after marriage. He has never been addicted to the use of alcoholic or other stimulants. No cause can be assigned for any of the symptoms which I have just enumerated. He is still a powerful, muscular man with, what I would call, the sanguine-nervous temperament, or

according to Professor Powell, the sanguine encephalo-bilious temperament.

He has been treated by the most eminent Old School physicians in this city without obtaining any relief whatever. The case has been diagnosticated as active congestion of the brain. One eminent professor here gave as his opinion, that there is caries of the inner table of the skull; another equally eminent in the profession, thinks there is either an osseous tumor or thickening of the dura mater, or pia mater, at the seat of pain; while another has diagnosticated it as softening of the cerebrum.

In addition to the numerous tonics, both vegetable and mineral, he has taken in large quantities the various narcotics and sedatives of the old materia medica, without in the least mitigating the intensity of the cephalalgia. He has taken large doses of the bromide and iodide of potassium, hydrocyanic acid, chlorodyne, cannabis indica, etc., without obtaining any relief. Blisters, issues, setons, and hypodermic injections of morphia and atropia have been tried in vain. In fact, the entire Allopathic materia medica has been exhausted in the treatment of this case.

On the 22d of last March he came under my care. I found the pulse ninety-two, the head hot, and the face flushed; urine slightly albuminous and loaded with the phosphates; the stomach unable to retain certain articles of diet, pyrosis occasionally, with a "gnawing" pain in the stomach after meals. I had not an opportunity of examining the vomited matter; but the patient informs me that it was generally dark, like clotted blood; but sometimes it was semi-transparent, and after being exposed to the air for a few minutes it would turn black.

I regarded the case as one of chronic dyspepsia, with perhaps a gastric ulcer, and chronic congestion of the brain of an active character, due either to the irritation in the urethra, or to innutrition of the cerebral mass. The first part of my diagnosis has proved correct, but I am by no means so certain of the second part. For the dyspepsia I prescribed hydrastin, myricin, and geranin, together with from five to ten grains of the sulphite of soda dissolved in a wine-glassful of cold water, three times a day after meals. After using this for a few weeks, nearly all the dyspeptic symptoms disappeared, and while I am writing the digestion is tolerably good. For the purpose of controlling the circulation, I gave the following:

℞. Fl. Ext. Gelsemini, ʒ ii.
Fl. Ext. Veratri viridis, ℥ iii.

Misce. Sig: Dose from four to eight drops every hour, or two hours, until the pulse is reduced to sixty-four, then continue according to its effect.

During the first two weeks he received very marked benefit from the use of this; the pulse was reduced to sixty per minute and the pain in the head somewhat relieved; but in the following week the pulse rose to eighty and sometimes eighty-five per minute, and the pain in the head increased, although he increased the dose of the sedative until it induced such prostration that he could scarcely walk. I have tried aconite and veratrum viride alone and combined, with the same result. The seminal emissions, however, have almost ceased; whether from the effect of the gelseminum and aconite or not, I cannot say. During the last ten days, I have been obliged to discontinue the sedatives on account of the extreme prostration they produced. I have given the fluid extracts of cypripedium and lupuline, but they seemed to aggravate the head-symptoms, and therefore had to be discontinued. Assuming that the irritation is due to impaired nutrition of the brain, the phosphates and the hypophosphites have been used for several months without affording any relief. The cephalalgia seems to be increasing, notwithstanding all the medication he has received.

That softening of the brain is not present, is, I think, evident from the absence of apoplectic symptoms; such as confusion of ideas, vertigo, hemiplegia, etc.; although the constant and persisting cephalalgia may finally bring about cerebritis and inflammatory softening of the brain. Osseous growths and other rare intracranial tumors would, no doubt, excite circumscribed cerebritis, which would induce softening of the brain-substance surrounding them, and as a result of this softening hemorrhagic extravasation would be certain to follow. Possibly the congestion may be in some way connected with hypertrophy or ossification of the so-called glandulæ pacchioni. Such is a brief history of this case, which is remarkable for the persistency of the cephalalgia, for the great difficulty in controlling the circulation, and for the absence, during six years, of the slightest remission. What the termination of this chronic congestion will be, is difficult to say. The preternatural excitability of the spinal cord, to which are due the muscular twitchings and the slight convulsive shocks just before and during sleep, may give rise to epilepsy, unless soon controlled. The cause, pathology, and treatment of this singular case, have baffled the ablest physicians in this city and in Edinburgh.

TORONTO, Ontario, 1870.

ECLECTIC PHARMACY AND NEW REMEDIES.

By Robert S. Newton, M. D.

At the present time, the science of materia medica and therapeutics is receiving more critical attention than perhaps at any previous period in the history of medicine. So much so, indeed, that it is more than probable that in a few years there will be required an entire new classification of the remedial agents employed. Not only have numerous new articles been introduced, but many old remedies have been found to possess valuable properties not heretofore known. Many of them have at this time an entirely different application as medicinal agents for the cure of disease, and a far more extended use than formerly.

The Eclectic school of medicine began and carried on this investigation many years when the other schools had given it but little consideration. When we speak of the work of the Eclectic school of medicine in this respect, we have special reference not only to the testing of these remedies and their introduction into practice, but to the influence exerted upon pharmaceutists and drug manufacturers in this country. They discovered that there was a demand for a large number of the leading articles as used by Eclectics; they were willing to listen to the pleading of the Eclectic profession in favor of the absolute necessity of furnishing a reliable, certain and efficient class of agents, such as could be demonstrated to act in greater harmony with the laws of the human system. The law of demand and supply made nearly every manufacturer of medicines in this country a willing subject; so much so that there has never been anything like the present interest and anxiety manifested upon this subject by manufacturers. In fact, all appear to be doing everything to excel in preparing, in the best form and from the best materials, medicines that may be relied upon by every reformed practitioner.

As a school of medicine we are proud of our *materia medica*, of our pharmacy, and of our dispensatory. We are also proud to know that our entire list of new remedies are introduced into the more

recent Allopathic and Homœopathic medical works; also to find that the manufacturers throughout this country are investing such large amounts of money, and procuring the best scientific ability to be found, for the purpose of perfecting their department of pharmacy.

Collinsonia Canadensis.

This agent is classified in the American dispensatory as a stimulant and irritant, and is said to exert an "influence on the mucous surfaces," and found "beneficial in chronic catarrh of the bladder," "fluor albus and debility of the stomach," with many other properties, such as "stimulant, tonic, emetic and diuretic."

My own experience with the use of this remedy has induced me to think that it has little or no effect upon mucous surfaces, nor does it possess the ordinary diffusible stimulant property. While it acts as a stimulant, it may be said at the same time that it possesses a powerful sedative property. Its physiological action is almost entirely upon the pneumo-gastric plexus; so much so, that in many conditions attended with high arterial excitement and cardiac irritation, it almost instantly overcomes this excitement. It is only through this medium that it acts upon the mucous surface of the stomach and other tissues of the body. This, like the veratrum viride, produces little or no effect in any organic disease, nor can it be relied upon in cardiac, pulmonary or gastric difficulties, but only in cases of functional derangement. While we use it very much in the latter conditions we have found it to possess little or no value in the former. Even under the most favorable circumstances, if given in large doses, it produces great prostration. While it may not reduce the frequency of the heart's action or a degree of irritation of the stomach, resulting in vomiting, like the veratrum viride, it produces a far greater amount of nervous prostration. If organic disease should not be present in the organs mentioned, I regard this, if given in large doses, to be a dangerous remedy. In some peculiar organizations, we have observed, even where there is no organic difficulty, a degree of nervous prostration to follow its use, requiring prompt and active stimulants to overcome its effects. Dr. Brown, of Pittsburgh, Pa., informs me by letter that, after taking the third dose of twenty (20) drops of Merrill's fluid extract, the nervous system became so prostrated, his hands and feet so cold, as to require active stimulants to produce reaction.

I have observed the same effect in some cases to follow the administration of every preparation of this article which I have had occasion to

use. While it acts with a great degree of certainty, I am satisfied that we have much to learn yet in regard to its range of application. I am fully convinced of the fact that it has been used in too large doses. While it has been recommended in a concentrated tincture, in from ten to thirty drops four or five times a day, I have found that ten or twenty drops given in twenty-four hours is as strong as is necessary, and has produced better results than when I have given it in thirty drops doses four times a day. I use it as follows: To four drachms of cold water I add from ten to twenty drops of the essential tincture or fluid extract, and then give this in four equal quantities in the twenty-four hours. I often combine it with the veratrum viride and the prunus virginiana, believing that it acts more kindly and certain upon the system, but never administer it except in functional derangements.

It is generally used by Eclectic physicians for cardiac difficulties, and in all cases depending upon gastric derangement, either of an acute or chronic character, it may be considered as one of our most valuable agents. The irregularity of the action of the heart attending hysteria, chlorosis and angina pectoris, will be greatly benefited, if not entirely removed by its use. When there is pain attending digestion, or congestion of the liver, and during the incipient stages of diarrhœa or dysentery, it has a very soothing effect. Combined with dioscorea and gelseminum, it acts promptly and beneficially in bilious cholic.

In the distressing irritability and restlessness which follow typhoid fever, pneumonia, pleurisy, gastritis and dysentery, it is far more trustworthy and certain than opiates, while having none of their ill effects. In our judgment it acts as a sedative and not as a narcotic, by reason of its specific action on the nerves of the heart; and we are also certain that it should be classified as a tonic, being such as certainly as prunin, cornin and hydrastin, only more delicate in its action.

AGRIMONY.

We called attention specially to agrimony as a remedial agent a few years since. It had never received attention enough to place it where it really belonged. As a diuretic, in all the ordinary conditions of the system, it will fulfill more indications than any other agent except gelseminum.

In cases of acute inflammation of the kidneys or bladder there should be good judgment exercised by the practitioner; he should know the actual operation of each remedy. The better method is to

divert the secretions and excretions from the kidneys, and impose upon those organs as little labor as possible, by endeavoring to increase the action of the intestinal surfaces and the skin, making these tissues for the time perform the office of the kidneys vicariously. In these conditions too active and stimulating agents have been used, which have increased the inflammation, and been often followed by complete suppression of urine or stricture of the urethra which could not be overcome, causing death or establishing strangury, which produced suffering worse than death.

We never use active diuretics in inflammation of the kidneys and bladder, attended with a high inflammatory condition of the system. We use them more than we do cathartics. After the inflammatory condition is broken up, and also in cases where we wish to produce a marked and decided action of the system, freeing it of any retained excretion which has become incorporated into or mixed with the blood, we rely very much upon this class of agents. We know of none in use equal to agrimony and gelseminum, or that can be used with so much certainty. In all the ordinary renal diseases, especially of a chronic character, in calculus formations, in catarrhal conditions and in ulcerations, nothing equals its action. When the secretion of urine is scanty and high colored, and the uric acid is not thrown off, as in scarlet fever and this class of diseases, it acts promptly.

In all the chronic forms of disease of the bladder agrimony is invaluable, and will meet a variety of cases with such a certainty as will surprise any of our practitioners.

Gelseminum as a Diuretic.

The ordinary action of this agent is so well known, and it is so generally used by our profession, that it may appear out of place to notice it again. While we admit this, we remember that until we first called the attention of the profession to it as a special diuretic nothing had ever been published upon the subject. As we do not intend at this time to more than repeat the fact that such is the case, we will here say that we use it in such a variety of cases indicating the use of diuretics that we rely upon this and the agrimony almost exclusively for the reasons given.

A combination of these agents will act promptly in the conditions referred to, and especially do we use this, to the exclusion of all other internal remedies, in gonorrhœa and all ulcerated conditions of the kidneys and bladder, in addition to the diseases mentioned above.

104 W. Thirty-eighth St., N. Y.

THE POISONOUS RHUS.

READ BEFORE THE ECLECTIC MEDICAL SOCIETY OF THE CITY OF NEW YORK, MARCH, 1871.

By R. E. Kunze, M. D.

The rhus belongs to the natural order of anacardiaceæ, which is composed of trees and shrubs having a resinous, gummy and milky caustic juice.

The name Rhus, is derived from ῥέω, *reo*, "to flow," so called because it was supposed to be useful in stopping hemorrhages. There are many species of rhus, many of which are highly valued for their use in tanning and dyeing, containing a large amount of gallic and tannic acid; others are esteemed for the valuable varnish they furnish from species found in China and Japan, and still others are known for the part they bear in relation to our materia medica and some of which are objectionable on account of their toxicological properties. I shall confine myself principally to the *Rhus toxicodendron* and *Rhus venénata.* The *R. radicans* is a mere variety of the *R. toxicodendron.*

Description.

The *Rhus toxicodendron*, is known by the name of poison oak, poison vine, poison ivy, poison creeper, and sometimes as poison mercury, which latter name strictly applies to mercurialis annua and mercurialis perennis of Europe, both being poisonous shrubs or plants. It is generally found in fertile land, but is capable of existing in different situations; sometimes it is found near rivulets, at others, in dry and elevated places. It has a slender ascending stem, which supports itself on the bodies in its vicinity. Like some species of ivy, it frequently climbs up to the top of our tallest trees, arriving at the height of forty or fifty feet. Very often it is met with along the sides of fences which serve it as a very convenient support and again it is seen winding its way over shrubberies or along the ground

for want of better support. The stems are from half to two and four inches in thickness, and are covered with a gray bark. When this plant don't find a convenient support and creeps along the ground, it never exceeds four or five feet in height and even less. In order to attach itself to trees and other objects, the stems are furnished with numerous threadlike radicles or tendrils, whence its name *radicans* or rooting. It sends off many small branches the ends of which are often pendulous and gives the plant a bushy appearance. Frequently it pursues a spiral course around its neighboring trees and often it is entwined in a beautiful manner with our ampelopsis quinquefolia or American ivy, from which it is not so easily distinguished except by the number of leaflets on a common leafstalk, the *R. toxicodendron* having only three leaflets on a petiole, whereas the Ampelopsis has five on each petiole. This should be had constantly in view by those who are easily poisoned by the Rhus, as they have so often been mistaken for one another. From the bark of *R. toxicodendron*, when it is wounded, exudes plentifully a milky juice, the same as from *R. Venénata*. When exposed to the air for a few hours, it changes to an intensely black color, which will leave an indelible stain on linen not effaced by any chemical known. Its taste is acrid. The leaves which also contain this milky juice, are trifoliate and pubescent. The leaflets, when they first appear in the spring, are of a shining red color; and when at maturity, of a light green, having a very agreeable odor. The leaves are eaten by cattle with impunity, according to Dr. Barton, and horses are said to be especially fond of it. The flowers are of a greenish-white color, very small, in simple axillary racemes, and in odor resemble the mignonette. The fruit is a round, dry berry, of a pale greenish tint, with a long seed, ripening in October.

The *R. Venénata* is known by the different names of poison sumach, poison elder, poison ash, poison wood, poison tree, swamp sumach, white sumach and varnish tree. It is almost always found in a fat soil in low marshy places near creeks or rivulets in dark and shaded situations. It is the largest of all our native species of Rhus, attaining at times a height of from twenty-five to thirty feet, though the average would be about ten to fifteen feet high. The trunk seldom exceeds five inches in diameter and after arriving at the height of four or five feet, divides into two branches, which again divide in a two-forked manner, each branch pursuing a regular oblique course or may divide into four or five smaller branches, which again sub-

divide into a number of umbels, finally sending off long sappy luxuriant shoots, and are terminated by a thick cluster of leaves. The singular disposition of the branches gives the tree a very elegant appearance, and with its beautiful foliage it presents an ornamental aspect highly pleasing to the eye. The bark is gray and smooth; younger branches are tubular and contain much pith. The natives used these hollow stems for making flutes and whistles, and also in the preparation of their pipe of peace.

In the month of May, when the leaves first expand, they are of a cupreous or dark yellow color, and when fully expanded assume a lively deep green hue, with the under surface much paler. The leaves are compound; each leaf consists of four or five pair of pinnæ or leaflets on a common petiole, as in the rose; and the leaflets are divided and redivided by very prominent nerves of an elegant red color, the same as the petioles. The flowers are small, of a yellowish color, arranged in small separate racemes on a long petiole, forming quite a large cluster of fragrant flowers at the end of the branches. These flowers attract innumerable swarms of bees, so that they perform one other good office. Taken altogether, this tree makes one of the handsomest shrubs imaginable when in blossom; though, at the same time, one of the most poisonous. It bears small yellow berries in October, hanging on small bunches, very much like grapes. To show how much this tree was feared by some of the early settlers, Dudley says (Philosophical Transactions of 1720):

"My neighbor, who was so badly poisoned by handling it, told me one very remarkable thing of the wood, and that is, that when he touched it, he plainly perceived it to differ from the other wood that he was throwing up into his cart; for it was as cold as a piece of ice; and withal assured me, he could distinguish it blindfold or in the dark from any other wood in the world by its coldness. The poor man is as much afraid of it, when he goes into the woods, as of a rattlesnake."

When incisions are made into the bark of this tree, it is followed by a copious flow of a viscid fluid, yellowish at first, and soon changing to a deep black color, very much like and identical with the *rhus vernix*, the varnish tree of Japan. It is of a disagreeable odor, and very acrid to the taste and irritating to the fauces.

The *R. pumilium*, a third variety, is described by Gray and Thompson as the most poisonous species of rhus in this country. It is an extensively prevalent villous-pubescent shrub, about a foot high, with pinnate leaves; leaflets about eleven, oval or oblong, slightly

acuminate, coarsely toothed, with a velvety pubescence; the three upper leaflets often confluent, the terminal one, when distinct, attenuate at base, panicles terminal, thyeroid, nearly sessile; drupes covered with a red, silky pubescence. It grows only in the southern States.

History.

The *R. toxicodendron* was early noticed and first described in 1635, by Cornutus, in his works on the plants of Canada, and was described as a species of ivy. The Indians were well aware of its properties as a poison and as a medicine, and the effects of emanations from it were mentioned by Kalm, and other travelers in North America. But it seems to have been first introduced as a medicine by Dr. Du Fresney, a French physician, in the year 1788, who had tried it successfully in several obstinate herpetic affections and cases of palsy. Still later, in 1798, it was mentioned by Dr. Horsefield; and many other physicians have experimented with it since that time. The leaves are the parts generally employed as a medicine, though the whole plant is active.

Chemical analysis of poison rhus reveals the fact that it contains gum, resin, gallic acid, tannic acid and an acrid narcotic principle which is very volatile and upon which its chief effects principally depend. On account of its tannin, poison Rhus produces a yellow dye with aluminous and tin mordants. With sulphate of iron it produces a deep black; but is not used excepting as an indelible and marking ink, for which purpose the juice is employed.

Physiological Effects.

The poison Rhus seems to act especially upon the nervous and muscular system; next, perhaps, upon the cutaneous and excretory systems. Upon the whole, it is to be considered as unreliable and dangerous. At times, it acts similar to nux vomica, and again will produce effects resembling the character of rheumatism. In other cases they will produce alarming constitutional symptoms. Sometimes the action seems to be directed especially to the skin and kidneys.

The toxical effects upon the system are both local and constitutional according to the idiosyncrasy of persons; acting upon some only locally; upon others only physiologically, and upon others both ways, without exhibiting any of its toxical properties. The leaves of

all plants are furnished with pores or stomas for exhaling or inhaling gases which are essential in absorbing nourishment as well as in throwing off excretory material which would be useless or injurious to the plant life. A volatile principle is thus constantly disengaging from the plant itself identical with the toxical property of R. toxicodendron. This principle is capable of poisoning at long distances, either by spontaneous disengagement or by being volatilized by the aid of heat.

Several cases of poisoning from eating honey from a particular source are recorded in the New Jersey Medical Reporter, for November, 1852, p. 46. It may be due to the fact of the honey having been collected by the bees from the flowers of R. venénata, to which the bees resort in great numbers during its flowering season. I hope that some one else will take up and still further investigate this subject, in order to establish or disprove this opinion.

The toxical effects of these shrubs and vines are produced in various ways and degrees of severity on certain constitutions susceptible to it, and often at long distances when the sufferer is not aware. Being worthless plants and of little value except medicinally speaking, and even then perhaps very much overrated, they ought to be extirpated by every thrifty farmer; and a neglect to do so would only reveal reprehensive carelessness.

Poisoning by either species of Rhus may be produced by direct contact with the leaves, stems and branches; by emanations from the plant itself, by inoculation with the fresh juice, by contact with the wood at any season of the year, by contact with the dried leaves or wood, by the application of a tincture made from the leaves, by exposure to the smoke from the burning wood, and, finally, by inhaling or otherwise coming in contact with the steam arising from preparing a decoction, or distilling the same.

The following case is related by John Buchanan, M. D., in his work, "Our New Remedies:" "A person having been preparing some of the tincture of Rhus toxicodendron, noticed the following symtoms of its toxic effects: Small vesicular tubercles, like insect bites, appeared in the joints of the hands and feet, particularly around the ankles, followed by excessive itching. From second to fifth day noticed swelling and redness of the right eyelids, so severe as nearly to deprive the sufferer of sight. A smaller swelling around the left eye; less itching in the eyes than in other parts of the body; itching worse at night; vesicles and tubercles on knees, hip and shoulder

joints. This action on the joints was quite a characteristic symptom. On the fifth day the itching diminished and the skin began to peel off. But the most remarkable effect of the rhus toxicodendron was the evident propagation of the poisoning from one person to another manifested by the eruption being brought out on the skin." *

Some constitutions are more susceptible to it under certain conditions of animal and atmospheric temperature and its direct effect upon the skin is by inflammation and vesication. 1. On some subjects a variation is noticeable, being either in a warm or cold climate. 2. Some few are affected by it only on very hot days, whereas, with others, the season of the year has very little if any influence. 3. Children are much more liable to be poisoned by it than adults. 4. In a moist state of the skin the poison is more readily absorbed, and therefore much more severe at such a state of the body, which is still more noticed during a highly perspiring condition, coupled with much fatigue of the body. This was remarked very early, by Prof. Kalm and others. 5. Females are said to be more easily affected by it than males. Dr. Barton, long ago, substantiated this peculiarity. That moisture does not destroy their poisonous properties, is shown by Fontana on Poisons (vol. 2). Fontana, in order to examine the emanations of the leaves of R. toxicodendron as he knew he was easily poisoned, observes: "I caused them to be got ready by another person, but I touched a few of the leaves when *under water*. In four days my face and hands swelled, etc."

Instances are even related in which a periodical return of the symptoms of such poisoning recurred for a number of years thereafter. Dr. Barton was poisoned in the year 1785, near the Ohio; a year after this, he went to Europe. In 1786, nearly at the same time of the year when he was first poisoned, most of the symptoms of the eruption returned. The eruption returned annually till the year 1790; at every successive attack, it was less violent in degree. Mr. Josiah Coates of Philadelphia, and Dr. Physick, have mentioned similar periodical recurrences of the same.†

In its *therapeutic* action, it is tetanic, stimulant, narcotic, diapho-

* This last statement I cannot substantiate.—R. E. K.

†*Dr. Barton*, mentions furthermore that he had in several instances, and in habits which were very susceptible of the poison, attempted to propagate it, by inoculation with the serous fluid contained in the vesicles, but in no instance was he able to convey any infection.

Bancroft, in his History of Guiana, states that the toxical effects of mancinella are easily overcome by copiously drinking and bathing of sea-water and the juice of limes.

Dr. S. Cooper derived most benefit in cases of poisoning of this kind, from the application of ice to the affected parts. *Kalm*, likewise, had used this remedy with advantage and others have spoken of it in praiseworthy terms.

retic, diuretic and laxative. In large doses it produces vomiting, vertigo and stupor, with increased diaphoresis and diuresis. It is recommended in very many affections, and in a recent work on new remedies, I have seen it proposed for no less than seventy-five different diseases. This certainly affords an inexhaustible field for further investigation; but the article should be employed with caution, as it is an uncertain remedy in constitutions of a peculiar idiosyncrasy.

The antidotes recommended for the constitutional effects of poisoning with R. toxicodendron are strong coffee, bryonia, sulphur, pulsatilla, camphor, tincture of guaiacum and buttermilk internally.

For external application in poisoning with Rhus, they recommend caustic ammonia, sulphate of iron, acetate of lead, permanganate of potassa, salt water, ice, salt and vinegar, buttermilk, borax, tincture of veratrum, cantharides, decoctions of convallaria, verbena urticifolia, chelidonium majus, quercus, sambucus, lobelia, diervilla canadensis and sempervivum pectorum. Some of these are to be boiled in milk and constantly applied to the parts.

The poisonous exhalations of Rhus and similar tribes of poisonous shrubs and trees, are due, it is claimed, to the disengagement of carburetted hydrogen gas. This is supposed to give rise to the poisoning at great distances, which we are told is the case in some instances. The juices of most of these plants are indelible if applied to linen, and some are manufactured into indelible and marking inks. It will also destroy warts and corns.

I will now report several of the cases which have come under my observation, regarding the toxicological effects of poison Rhus and its treatment:

Peter B., age twenty-one years, of a bilious lymphatic temperament, was peculiarly susceptible to the poisonous effects of Rhus. On the day after exposure in July, 1854, his face and hands began to swell. The next day the swelling had assumed a bloated appearance and involved the whole body and extremities. The parts first involved, itched excruciatingly and blebs or blisters, as large as small marbles, appeared. This condition soon extended over all the body. The itching and agony were so severe, that his hands were tied in order to prevent him from tearing the skin. The skin between the blisters had assumed an erysipelatous appearance, tense, shining and of a deep red color. A high fever supervened, and he had to be watched continually, both by day and night. His features were so obliterated by the swelling, that he was scarcely recognizable. Under timely treat-

ment with active diaphoretics, the fever was subdued, and the swelling reduced. The itching was allayed by the constant application of buttermilk and salt, and a cooling regimen in general. Desquamation of the cuticle, soon closed the convalescent period, and the patient was discharged cured, within a week from the time of the attack.

Wm. R. S., age eighteen, was of a sanguine-lymphatic temperament. He had come in contact repeatedly with some of the poison Rhus, during a ramble in the country in June, 1861, and the usual effects of poisoning manifested themselves on the second and third days after the exposure. Swelling of the head, face and hands with itching, were the first spmptoms. The skin did not assume that deep red and shining appearance, as seen in some cases of erysipelas, but was covered on the third day with patches of small whitish vesicles, crowded together, and producing the most intense itching. The vesicles assumed a yellowish color, when fully developed. During the height of the attack, his head was of an enormous size; the eyes completely closed up, but there was not much symptomatic fever. In from five to six days, the eruption declined; the cuticle peeled off and left the afflicted parts somewhat irritated for a short time. The treatment in this case consisted of the application of buttermilk and salt externally, alternated with fomentations of lobelia and raspberry leaves. When the itching was severe, we applied the compound tincture of lobelia and capsicum. Mild cathartics and a cooling regimen concluded the treatment.

I will relate my own case, which happened some seventeen years ago. While in the country with my preceptor, I assisted him in straightening some fence posts, during the early part of April. The posts were entwined with poison Rhus, and we had to detach the winding stems. The plant was not yet in foliage, and my preceptor, who by the way was poison-proof to the effects of Rhus, neglected to caution me against handling the stems, thinking, possibly, that at that particular season they were innocuous. In less than two days, some parts of my face and hands, and especially on the dorsal surface and between the fingers itched, and minute vesicles on an inflamed base, made their appearance in irregular patches. By means of my hands, the poison was communicated to other parts of the body, and partook of the same development. Some of the vesicles were confluent, and after changing to a yellowish tint, dried up and desquamation ensued. There was neither any swelling nor symptomatic fever present, and there has never been, at any subsequent poisoning

with R. toxicodendron on myself. My treatment at that time, consisted in applying tincture of lobelia, which did not relieve the itching. Scratching the affected parts was a luxury, and gave decided relief. Eight years afterward, I made the acquaintance with R. venénata, toxicologically speaking, while I was collecting elder berries in the immediate vicinity. Not knowing the shrub, I took no notice of it. Its effects were similar to those produced by R. toxicodendron. Since that time I have been poisoned repeatedly, while engaged in collecting medicinal plants; and for three years I have used but a single remedy, carbolic acid, diluted. I believe that here the axiom of Allopathy "*contraria contrariis curantur*" is befittingly applied, and that for itching, counter-irritation is *the* remedy.

So far I have not failed in a single instance in checking the progress of poisoning with Rhus, on myself as well as others I have had under my treatment, when carbolic acid was timely applied. I use generally the crystals, diluted with from one to six parts of glycerin, and paint the parts two or three times a day. This allays all itching. When there is much of an erysipelatous inflammation I add strong tincture of veratrum viride in place of some of the glycerin. If it need be I would use carbolic acid in full strength and treat it thereafter as a common burn, either with olive oil and lime water, or mild zinc ointment. But I do not advise the use of it so strong; it is seldom necessary. In cases where blisters have appeared and the cuticle is denuded by scratching, I would not recommend the use of carbolic acid unless it is highly diluted, as it would only add fuel to the fire; but instead I would recommend cooling lotions and a soothing cataplasm of ulmus fulva and lobelia inflata.

Another case which I treated in July, 1868, was that of a farm laborer, age thirty-five years old, of a bilious temperament, who had been poisoned on his right hand and arm. The arm was much inflamed as high up as the elbow and presented a full crop of shining vesicles. The itching was so violent that he could not sleep at night. I gave him

Carbolic Acid,	ʒ j.
Tinct. Veratrum (sat.),	ʒ j.
Glycerin,	ʒ iv.

Mix, and apply three or four times a day, or until the itching was overcome.

In a week my patient was discharged cured. During the last sum

mer I have treated two more cases, which in every respect resembled the cases already spoken of, and yielded to the same remedies.*

This leads me to believe that in carbolic acid we have found the proper antidote to the aggravated itching. When once that is overcome, there is no further difficulty in curing a patient.

Poisoning by the Cashew Nut.

I will here relate another case of poisoning, produced by the cashew nut, the *Anarcardium occidentale* of the West Indies, which was communicated to me by a friend and medical student of the Eclectic Medical College of New York (Mr. H. R. Allen), a few weeks ago. A gentleman, employed in the custom-house in this city, picked up a nut which had rolled out of a case containing such, and out of curiosity broke it to pieces with a hammer, and having exam-

* Since the above article was written another opportunity was granted me to observe more critically than ever the toxical effect of rhus venenata on myself once more; and the treatment above referred to, with slight variation and modification was carried into effect with the same good result. On March 29th I went over to New Jersey for the purpose of collecting medicinal plants and making observations, and while there came suddenly across a snake which I determined to secure. Hastily cutting a sapling which grew near by, without however scrutinizing it very closely, I found out when too late, that I had secured a young shoot from an old stump of R. venenata. Within a few hours afterward I perceived a burning sensation of the scrotum, and increasing very sensibly so. By evening it amounted to smarting, and the parts began to tumefy as the itching increased. Then were noticed the first effects also on the hands or fingers, over the metacarpel bones and between the phalanges. There was no tumefaction on either the hands or fingers, and neither on the face, which underwent the same pathological change the day following. That same night the symptoms increased in severity, and in the morning the parts looked inflamed, with a minute eruption of vesicles just forming over the dorsal surface of fingers and hands; which condition was now observable on inner portion of thighs and good part of the face also more itching. In fact the affection seemed to attain its utmost limit of severity, and passed from one stage to another in regular order as heretofore related, modified of course by the treatment as recommended and laid down previously. The affection was checked at the wrists and over the inferior maxillary bone. The attack was at the height on the third day, when the hands and fingers were literally covered with that pathognomic eruption which enables us so readily to distinguish it from a true erysipelatous condition. The first day after infection I applied equal parts of pure carbolic acid and glycerin to the hands, fingers and thighs. The itching was thereby much relieved. On the second day I applied dilute carbolic acid to the dorsal surface of the hands, over the metacarpel bones of the thumbs and index and middle fingers where the affection had run the highest. This one application stayed all further itching there but at the expense of the cuticle subsequently. The fingers, wrists and parts of the face and thighs were treated as before, by applying twice a day equal parts of carbolic acid and glycerin, which held the itching in check. On the scrotum I determined to try an application of sulphate of iron. I penciled the parts with equal parts of persulphate of iron, Mousel's solution, and water. This stayed all itching for twenty-four hours; it recommenced however the following day and was held in check with the mixture of carbolic acid and glycerin. The effect of the persulphate of iron was more lasting but did not cut short the affection any quicker than carbolic acid. It stayed the swelling where applied but did not stop the itching immediately.

On my hands and fingers I tried likewise by way of experimenting, the pure acetic acid, and found it equally as good as the carbolic acid to allay that itching. I also experimented with the pure oxalic acid, and it answered to the same purpose wherever applied. On the sixth day desquamation of the cuticle took place, and very severely so until the twelfth day, wherever the pure carbolic acid had been applied. On the fourteenth to fifteenth day, from the day of infection, desquamation was completed and all traces of the affection fast disappearing.—R. E. K.

ined and smelled of it, put the pieces in a pocket of his pantaloons. The next day his face and hands showed signs of poisoning. Much swelling under the eyes and over the cheek bone, side of the face, ears, hands and wrists, which was shortly followed by a vesicular eruption, giving rise to intolerable itching. Finally the affection appeared on the inner portion of the thighs and scrotum, causing the most intense pruritus. My informer, a friend of the sufferer, suggested poultices of slippery elm and flax seed, to remove the swelling from under the eyes, after an ointment of carbolic acid had been ineffectually used, only, as he stated, to aggravate the symptoms. He had also used a lotion of alnus rubra, and as far as this treatment was carried out, it proved successful in arresting the spreading of the poison and relieved the suffering. A "regular" physician, who had volunteered his opinion, pronounced it a case of eczema.

No. 606 Third avenue, NEW YORK, 1871.

ERYNGIUM AQUATICUM.

By James L. Reat, M.D.

The eryngium is a remarkable indigenous, herbaceous plant, having a stem from three to six feet high generally, branching by forks, but near the top becoming trichotomous, each peduncle bearing a ball, upon which there appears a white, inconspicuous flower during the month of June. The leaves resemble those of young corn, being heavier, rough, and are more of a bluish green color, but are broadly linear, from one to three feet long, and from one to two inches wide, with bristly spines upon their margin and one at their tip.

This plant, appearing like one of the endogens, grows luxuriantly upon our western prairies, and is known by the various names of rattlesnake's master, buttonsnake root, cornsnake grass, rattlesnake weed, etc. But these provincial terms are applied to different species of agane, liatris, senega and cimicifuga, having little therapeutical or botanical significance, reference being made to them only to prevent confusion. Authors have assigned to it only an inferior rank in the materia medica, and it is prized more highly in families than by physicians.

I have, however, heard that it is almost a specific in cystitis, in that form of inflammation of the bladder characterized by great pain in the organ, attended with fever, hard pulse, frequent and painful micturition, or to a suppression of urine; and, generally, tenesmus, sometimes accompanied by nausea, vomiting and delirium. I here give particulars of several cases of successful treatment:

I. Mrs. B. had been treated for various uterine affections; she came under my care May 5th, 1867. Upon examination I found a red tumor at the orifice of the urinary canal, which had given rise to a very great amount of pain, and also to serious errors in her treatment. I excised the tumor, which resembled a ripe strawberry of medium size; the eschar healed kindly, but the mucous membrane had become hypertrophied, and the inflammation involved the bladder. After a great number of remedies had been tested and little or

no relief obtained, the patient was placed upon the use of the eryngium, with the very best results.

II. Mrs. C., slowly convalescing from typho-malarial fever, had painful micturition, passed a number of small renal calculi, and had almost constant tenesmus of the bladder. Other agents were used, but the eryngium was the only one that gave prompt relief.

III. Mrs. A. had been much reduced by protracted sickness; had suffered severely from cystitis, incontinence and tenesmus, both being present and very troublesome. The eryngium, given in full doses, was all that was required to effect a cure.

The best mode of administering it is in decoction:

℞. Eryngii succulent, rad. ℥ ij.
Water, gills vj.

Boil them to a pint and strain. Dose, two fluid ounces every three or four hours.

SCROPHULARIA, OR FIGWORT.

By William Parkinson, M. D.

The scrophularia nodosa, or knobby-leaved figwort, is a native of Europe, and is found in different parts of the United States, in woods, hedges, damp copses and banks, flowering from July to October. The heal-all, or carpenter's square, is a distinct species of similar therapeutical properties. The figwort is described as alterative, diuretic and anodyne; highly beneficial in hepatic diseases, scrofula, cutaneous affections, dropsy, and as a general deobstruent of the glandular system, when used in infusion or syrup. It is also said to restore the lochial discharge and to be specific for difficult menstruation.

The figwort is especially alterative, diuretic and resolvent. A tincture of the dried leaves is useful in nephritis and scorbutic diseases; combined with irisin, I have found it efficacious in glandular swellings; likewise as an alterative, combined with podophyllin, in some troublesome forms of skin disease. It is of great value, as an outward application in *varices*, *piles* and *glandular swellings*, for which purposes a strong decoction, tincture or ointment may be used. In varices, a bandage should be worn over the part, and kept constantly moist with a decoction of the plant, at the same time it is requisite to attend to the general health; this I have always found to have a good effect, much superior to *hamamelin*. For glandular swellings, an ointment or tincture may be frequently rubbed on the affected part, and a medicine administered internally, made of the tincture of scrophularia, combined with irisin, and a little podophyllin. For piles, a warm fomentation applied to the part, *i. e.*, a strong decoction made of this plant, together with a mixture comprising the tincture of scrophularia and podophyllin, is invariably successful.

In one instance, I employed it in the treatment of aneurism of the abdominal aorta, between the epigastric and left hypochondrial region. The patient was a female, married; she attributed it to a paroxysm of coughing, some months previously to applying to me;

it had gradually increased until it was almost the size of an (hen's) egg; the pulsation could be easily seen. She complained of a difficulty of breathing on the least exertion, sickness, pains in the loins and in the abdomen, together with general weakness of body. Immediately ordered a bandage to the body, and a compress composed of six or eight folds of linen, saturated with a strong decoction of scrophularia, and applied to the part underneath the bandage, and the compress was kept constantly moist with the decoction. The heart was brought under control with the concentrated tincture of veratrum, and the general health improved with tincture of cinchona and antispasmodic drops. In two weeks the pulsation was but just perceptible to the touch, and in about twelve weeks nothing remained but a little hardness of the part. This treatment was over two years ago and she has remained well ever since.

The tincture is usually prepared from the coarsely powdered leaves by displacement, *i.e.*, one ounce of leaves will make four ounces of tincture in the ordinary form. The ointment is prepared from the whole plant. The scrophularia aquatica or water figwort, which grows by the side of ponds and ditches, has a fibrous root, and leaves somewhat resembling betony (and is commonly called *water betony*). This plant possesses similar properties to the scrophularia nodosa, but in a somewhat less degree; both plants are worth a better attention than has been bestowed upon them.

PHOSPHORUS AS A REMEDIAL AGENT.

ESSAY PRESENTED AT THE ANNUAL MEETING OF THE ECLECTIC MEDICAL SOCIETY OF THE STATE OF NEW YORK, JANUARY 25th, 1871.

BY HELEN A. GOODSPEED, M. D., WORCESTER, MASS.

Since the discovery of phosphorus in 1669, by Brandt, an alchemist of Hamburg, while attempting to discover in putrid urine something capable of converting silver into gold, it has until recently been but little used medicinally; but recent investigations and experiments have more fully developed its power and efficacy in the treatment of diseases. Like all new remedies of any merit, its valuable properties have been probably overrated by some of its more zealous advocates. Phosphorus, nevertheless, possesses great power, and is capable of producing serious results when carelessly or empirically administered. In certain diseases that are not amenable to other remedies, it will prove curative; and so important are its relations to the human economy that life could not be supported one moment without its presence.

It is found as a constituent of the bones, nerves, brain and hair. Cerebric acid contains nitrogen and phosphorous, and is the peculiar component of the brain and nervous system. By the combustion and changes of oxydation in the brain, the phosphorus of cerebric acid is converted into phosphoric acid. Thus every act of the brain produces phosphoric acid, as the result of use and waste of material.

The rapidity with which the phosphoric element of the cerebric acid is consumed, will clearly be seen in that highly active and exciteable state of the nervous system, which is so peculiar to consumption. How necessary, therefore, in order to preserve the brain from destruction, to meet this demand for phosphorus by introducing it anew into the system.

But great care is necessary in its administration. In over doses, it is a powerful irritant poison, and when taken in solid substance, causes

irritation of the alimentary canal, inflammation of the urinary system, muscular cramps, headache, giddiness and death; and in the pregnant female, abortion. Mulder regards the fibrine of the blood as the oxygen-carrier; and supposes that by this oxydation it becomes converted into the binoxyd and tritoxyd of proteine; its phosphorus and sulphur, for it contains both, being converted into phosphoric and sulphuric acid.* The necessity will be seen for its introduction either by food or medicinally, as the way to supply the fibrine with materials to destroy its surplus of oxygen. Chemically considered, its affinity for oxygen is greater and more active than that of any other known substance that forms a component part of organic bodies, and its presence in every part of the human economy, indicates its importance.

There cannot be a healthful growth, where a larger quantity of phosphates are excreted by the kidneys than is normal. The human organism exhausted by the constant drainage of its phosphates, becomes emaciated; there is coldness of extremities, destruction of blood-cells, and a complete exhaustion of all the forces of the economy. Such cases frequently end in diabetes, and not a few in Brights' disease, or albuminaria.

The development of new tissue, is the result of the dynamic force of phosphorus; the exudations that form the basement of all new structures, are particularly rich in phosphates. The increase of phosphorus in the nutritive fluids of parts undergoing the reparative process, is very striking, and attention has not been paid enough to the fact.

The process of combustion and elimination of force thereby, is and *must* be the whole foundation of our science of cure.

As an element, like oxygen, phosphrus is typical of life; its components are ever on the change, seeking new relations and evolving new dynamics. Its highest combinations with oxygen are allotropic and formative, while its relations with other elements are catalytic or destructive. The deficiency of it in the system, gives rise to marked symptoms. First of all, there is usually a feeling of exhaustion, so

* The accomplished author is doubtless aware that these two agents have long been regarded, except by the learned alchemists, as *diabolical* elements. Thus the Greek name φωσφόρος, *phosphorus*, is identical with the Latin term *Lucifer*, the bringer of light. Many savans, therefore, supposed it to be the *materia peccati;* and, perhaps, were not absolutely wrong. Sulphur (Greek θειον, *theion*, divinity) has been so long consigned to the *odium theologicum* and tartarean uses, that despite its uses, we hesitate to pen a line for the retrieval of its reputation; but it deserves it —A. W.

peculiar, that the patient cannot account for the tired, indolent mental and physical sensation that creeps over him so sinuously.

The muscles gradually grow tender and sore; the nervous system becomes gradually irritable, and the sensibilities are more and more acute; after a while the senses are inclined to become blunted as the change goes on. The temper now alters. The patient becomes morose, irritable, loses his appetite in a measure; the secretions are variable; he does not awake refreshed from his sleep, but feels confused and always tired; and, in fact, to all appearance, is a lazy, indolent person. In time the memory grows treacherous and is gradually blotted out, and the mind partakes of this growing feebleness.

Usually some one organ receives the shock; and marks the character of the disease. Frequently the stomach is the organ to take the brunt of the attack, a case of irritative dyspepsia thereby ensuing, more or less frequently accompanied by the presence of oxalate of lime, in large quantities in the urine. But a more formidable state may arise in which grape sugar is passed in large quantities with the urine.

In all cases where there is a deficiency of phosphorus there are two striking features: Cold extremities and sensitive nervous centers. Among the many local phenomena may be mentioned profuse secretions from mucous membranes; passive engorgement of the organs; functional disturbances of the liver, heart, uterus and stomach.

Locomotor ataxia, ramollissiment of the brain, insanity, and many other concurrent phenomena owe their origin to the loss of phosphorus in the system there is no doubt; for in every less enfeebled condition of the nervous system, where the symptoms indicate a lack of this constituent, given in small doses, it fulfils an indication not met with in any other remedy; restoring completely to the system its lost balance, and building up the patient promptly and efficiently.

For the last few months I have been using it in psoriasis, with marked success, and in cases where it would not yield to any other remedy. How it acts on the organism I am not prepared to say, but think that there being a deficiency of phosphorus, the capillary circulation is enfeebled, causing this cutaneous eruption.

Phosphorus is a semi-transparent solid, is flexible, and has a waxy lustre. I prefer Hayden's phosphorus pills to any of the preparations in use; the phosphorus appears to be more easily assimilated. As this agent is a great retarder of nutrition, it must be well borne in mind and

given in minute doses, gradually increased; and as soon as the slightest change is perceptible for the worse, it should be discontinued for several days, and then commenced again in smaller doses. It requires great persistence in its administration, and must be given regularly.

I wish that others would express their judgment in regard to this agent.

ECLECTIC REMEDIES FOR SMALL-POX ADOPTED IN ENGLAND.

THE CURE, ARREST AND ISOLATION OF SMALL-POX, BY A NEW METHOD.

BY JAMES J. GARTH WILKINSON, M. D.,* LONDON:
Member of the Royal College of Surgeons, Surgeon of Hahnemann Hospital, etc.

BENEFICIAL ACTION OF GOLDEN SEAL.

To the Physiological Sub-section of the British Association:

The hydrastis canadensis is a drug which has been employed in the treatment of various diseases, both in local and internal administration; and the object of the present paper is to record the power which it exerts over small-pox, in modifying the disease, abolishing its distressing symptoms, shortening its course, lessening its danger, and greatly mitigating its consequences.

Four cases treated by myself with the hydrastis have yielded one constant result. Of these cases two were moderately severe distinct small-pox; the third was a case of severe confluent small-pox, with ardent fever, and great local swelling of the head, face, and neck; the fourth case was typhoid, the eruption slow in development,

* James John Garth Wilkinson, is a Homœopathist by profession, is a mature scholar and a man of superior ability. He is author of several works characterized somewhat by their curious matter; among them, "The Human Body and its Connection with Man," "Swedenborg, a Biography," which the late Professor Bush once criticised for its unusual, not to say unfavorable explicitness of statement in regard to the Swedish seer; and a discourse upon women physicians, taking advanced ground in their favor. Dr. Wilkinson is a "New Churchman," and has translated the following scientific works of Emanuel Swedenborg into English: The Animal Kingdom considered Anatomically; Outlines of a Philosophical Argument on the Infinite and the final cause of Creation; Posthumous tracts: A Hieroglyphic Key to Natural and Spiritual Mysteries, by way of Representatives and Correspondences; The Generative Organs, considered Anatomically, Physically and Philosophically.

Dr. Wilkinson is an attractive writer, of superior professional attainments, and possessing great candor and courtesy. He spent several months in this country a year or two ago, and after his return home published a treatise entitled, "On the Cure, Arrest and Isolation of Small-pox." The remedies on which he depends are hydrastis, or golden seal, veratrum viride, and baptisia or wild indigo, with lotions of sulphite of soda. Many of his ideas are trite and familiar to Eclectics, but they are entitled to careful consideration and cannot be repeated too often.—A. W.

petechial from the first, and rising from a ground of the worst description of measles; and it became uninterruptedly confluent over the head and face, and over nearly the entire body and limbs. The patient was a very delicate girl, laboring under menorrhagia during the greater portion of the attack; and laryngeal, tracheal, and bronchial symptoms proved that the eruption invaded the internal mucous membranes throughout a large portion of their extent.

Thus, though my number of cases was limited, their range of symptoms was considerable. In short, they covered something like the whole ground of small-pox, and in them all the success was so decisive, so prompt, and so grateful to the patients, that I look to a repetition of the same success wherever the same means are properly applied to the disease.

For a statement of my cases, their symptoms, duration and treatment from day to day, and the consequences of that treatment, I beg to refer to a pamphlet, "On the cure, Arrest, and Isolation of Small-pox, by a New Method," published by me during the present year. But this treatment, in detail, I endeavor to make known, for the first time through the medium of the British Association.*

The alleged results are so extraordinary that it is a satisfaction to know that they can be at once proved or disproved in the small-pox hospitals, and by medical practitioners all over the country. They need not, therefore, rest on my personal testimony. Considering the nature of the disease, and the simple and easy means I have discovered of treating it, is it not a duty that I should make it known to you as the highest and widest tribunal of medical discovery in the British dominions?

VERATRUM VIRIDE.

Hitherto I have mentioned the hydrastis canadensis alone; but there is another drug of which I have made equal use in my combat with small-pox; I mean the veratrum viride. The sphere of its action is not, however, peculiar to small-pox, but extends also to erysipelatous inflammations generally; and, indeed, in the hands of the discriminating practitioner, to the whole circle of congestions and inflammations. Like the hydrastis, I employ it also locally as well as internally.

* Hardly correct. The properties of hydrastis are fully set forth in King's American Dispensatory; and it has been employed by Eclectics for more than a quarter of a century. *It is not praised too highly.*—A. W.

I need hardly observe that complications will arise which require their own treatment in this as in other diseases; it is, however, with the great features of small-pox that I now propose to indicate my method.

And first for the drugs themselves. I employ the concentrated tinctures of hydrastis canadensis and veratrum viride as follows: Mix together a large tea-spoonful of each in a tumbler of water for local application, and as soon as the disease appears on the skin, dab the affected surface frequently with the lotion. For this purpose a little of it may be warmed in a cup placed in hot water, in order that it may not chill the patient. Let it dry on the skin, only sponging it off occasionally to prevent stiffness and discomfort. As the eruption develops the sponging may be more frequent, and, if the inflammation be intense, double the quantity of veratrum viride may be employed, though I have obtained all my results with the single tea-spoonful to the tumbler. The veratrum viride is, however, comparatively harmless when locally applied, and produces no injurious consequences to the sound skin, even when painted on it in the form of a concentrated tincture. When the swelling is considerable, as in the first days of confluent small-pox, single linen rags are to be wet in the warmed lotion and kept applied continually to the parts; *e. g.*, over the whole head and scalp, face and neck, the rags being skillfully covered in with gutta percha tissue, so as to keep inflamed surfaces in a vapor bath of the combined drugs. Finally, if the general strength will bear it, and the means are efficiently at hand, a complete bath at ninety-six degrees, once or twice in twenty-four hours, medicated with two tea-spoonsful of each of the concentrated tinctures, and exhibited from three to ten minutes at a time, according to the effect, will, I believe, be an active and agreeable means of keeping up and extending the curative medicinal actions. This bath however, I have not yet tried in small-pox, but I hope to do so in future, in conjunction with the free use of stimulants, which play an important part in the present mode of treatment.

As the inflammation of the skin and the primary fever subside (which they do in from twelve to thirty-six hours under the treatment in question), the veratrum viride is omitted from the lotion, and only the hydrastis canadensis applied, and this continuously every hour or two so long as the pustules are developing. If the inflammation occurs again, the veratrum viride is again made an ingredient of the tumbler.

Sulphite of Soda.

If there be cases in which the veratrum viride does not abolish the erysipelatous swelling that surrounds the eruption, after eighteen hours' trial, and before the pustules are broken, mix a dessert-spoonful of coarsely powdered sulphite of soda with a pint of water, and apply this as a lotion instead. It is a marvellous remedy, locally applied in erysipelas, especially where great exhaustion and collapse are present. It should not, however, be applied on the face after the pustules break, excepting very cautiously and attentively. Try it in the worst cases.

This is the sum and substance of my local treatment of small-pox, and it is applicable all through the disease, including also the secondary fever; but which, indeed, can hardly be said to exist under these ministrations.

The preparations I use are the concentrated tinctures of hydrastis canadensis and veratrum viride, prepared by Keith & Co., of New York, and the fluid essences of the same drugs prepared by Tilden & Co., of the same city. [More correctly, of New Lebanon, Columbia county.]

In order to put my method to the proof, medical practitioners should be careful to be supplied with these preparations, and not with their English substitutes. A good tincture of veratrum viride is made in London, but my results were not obtained with it.

Mode of Application.

The hydrastis, however, can be applied in various ways; either in the cold infusion (a table-spoonful of the powdered root stirred in a tumbler of water, and the clear liquor employed as above); or, what is a convenient method, where the pustulation and moisture are considerable, by dredging the surface with the powder itself. The latter application may sometimes be usefully alternated with that of the concentrated ticture, the change for the time being grateful to the skin.

So much for the external applications, for what we may call the general local treatment. The internal treatment is pursued with the same remedies. As soon as the disease is suspected, twenty drops of the concentrated tincture of hydrastis are mixed with twenty dessert-spoonsful of water; and a desert-spoonful is administered every four hours; and, as the disease develops itself, the same dose is given every two or three hours, according to the severity of the symptoms.

When the fever and erysipelatous swelling of the skin recede, add to the above mixture thirty drops of the concentrated tincture of veratrum viride, and administer the combination at the intervals mentioned above. Let the effect be watched, and if faintness or prostration, very slow pulse, with nausea and great perspiration are produced by the veratrum viride, the use of that ingedient must be suspended for a time.

BAPTISIA, OR WILD INDIGO.

Where putrescence is a marked type, and also where the pustulation is greatly developed in the mouth and on the fauces, the concentrated tincture of baptisia tinctoria (Keith's) is very serviceable, and may be given in combination with the hydrastis, in doses of from three to five drops, mixed with each dose of the latter.

Toward the conclusion of the disease, where a tonic is needed, the hydrastin, an extract or "alkaloid" of the hydrastis, may be given every four hours, in doses of from a quarter to half a grain, dissolved in a table-spoonful of water.

With these simple medicinal means, I have obtained results unparalled in the treatment of small-pox.

DIET.

The dietetic treatment is modified by the fact that the hydrastis, from the first dose and the first application, is extinguishing the varioloid poison, and that the veratrum viride, with even greater promptness, is rendering the skin tissues and the cellular tissues incombustible, and is destroying the inflammation and the capacity of the system for inflammation. In consequence of these attainments the danger of internal complications, bronchitis, pneumonia, cerebral and abdominal fever, inflammations, or decompositions of tissue, is so far lessened that the chief aim of the practitioner is directed to sustaining nature under the shock of the disease; in short, to gaining time for convalescence by judicious diet. This should be such as is appropriate in cases of erysipelas, of severe boils, carbuncles, snake bites, and other maladies attended with nervous prostration from vitiation or poisoning of the blood. Among these means alcohol and water, brandy and water (save in the crisis of ardent fever, when veratrum viride has the first part to play), is of the chiefest importance, and should be gradually and experimentally administered. The Hungarian wine, Carlowitz, or claret, one part in two or three of water, is

an agreeable and refreshing diluent, and an excellent roborant for the blood; and later on, when the hydrastin is wanted, port wine may be given, if a greater quantity of blood nutriment is required. Good beef tea should also be supplied, according to the digestive power. Fruit is the best solid to commence with. In short, a liberal stimulant and fluid nutriment diet is to be pressed against the prostration of the disease throughout, the cup to be drawn back whenever nature says "hold!" by any sign of gastric and general distress, and to be proffered again as soon as such symptoms have abated. In the worst cases pure rum, whisky or brandy should be given *ad libitum* to keep the patient alive, as is done in snake-bites.

There is, I am sure, nothing new in this dietary, yet it is important to remark that the hydrastis and veratrum viride render its application at an early stage of the disease, and indeed throughout, more safe and feasible than it would be under the old treatment.

Summary of Results.

The success at present attained may be collected under the following heads:

1. The disease has been abridged in duration. (In my first severe confluent case, to which also I was not called until the face and neck were one continuous pustule and the head swollen hugely, the symptoms were over in a week, and on the eleventh day from my first visit the mask of scab had all separated, and the patient was out in Kensington Gardens.)

2. The inflammation and primary fever are certainly and speedily subdued.

3. The pustulation is arrested, and the secondary fever is annulled.

4. There is no itching of the pustules, and the patient has no motive to pick the face.

5. There is scarcely any pitting, and á fortiori, there is no seaming, even where the face has been one bag of matter; although, in such cases, the complexion is roughened for a time.

6. The stench of the old disease has no place.

7. The suffering is reduced to a minimum.

Owing to the antiphlogistic exactitude of the veratrum viride and the specific power of the hydrastis, stimulants are borne from the first.

These statements are astounding, but a careful, brief trial will prove their truth.

It remains to notice that in but one of my cases has infection been communicated in the houses; and this circumstance (upon which I might dwell if time permitted), coupled with the complete destruction of the stench of the disease, leads me to infer that the hydrastis not only kills the poison in and on the system but neutralizes, encases and isolates the detached and detaching poison-particles, and renders them inert and non-contagious, thus separating the sick from the sound by an impregnable film of quarantine.

The same circumstance leads to the further inference that the hydrastis, administered internally and applied externally to the healthy in infected houses and districts, is prophylactic against the attack of the disease; for whether the sound person is fortified and encased, or the disease imprisoned, amounts to the same thing. I have therefore administered drop doses of the tincture of hydrastin n. 6, twice a day, in a table-spoonful of water, where the contagion is feared; and the safety may be completed by a tea-spoonful of hydrastis tincture in a cold or tepid sponging both night and morning. A pilule of hydrastis n. 6, night and morning, may be given to the children. These means are of easy application; and, if my reasons be correct, they will tend to seal the population against the spread of the disease.

Lastly, the shortening of the disease, which I have undoubtedly effected, gives good hope of the greater result of its extinction; and as this object has not before been attempted, the attempt is a new position, and may be crowned with success. Hitherto a conscientious dread has prevailed of suppressing the disease, though the record of suppression by medical agency has not come under my notice. Suppression were indeed fatal, but extinction is cure. There is no better reason why small-pox should run its course than why erysipelas should run its course, or carbuncle. It is a disease which engenders itself in its progress, and consequently its extinction at the commencement is the object to be obtained. As erysipelas in formidable cases can be extinguished in a few hours by lotions of veratrum viride (and also with surprising rapidity by lotions of sulphate of soda), so properly can small-pox by the veratrum viride and hydrastis combined if properly and energetically applied at the outset. This now remains to be essayed. To this all efforts should be bent; and I am not without confident hope that in the simple means which I have brought before your honorable section there lies the power of so great a result.

DIAGNOSIS OF PATHOLOGICAL CONDITIONS.

READ BEFORE THE ECLECTIC MEDICAL SOCIETY OF THE THIRTY-SECOND SENATORIAL DISTRICT.

BY C. C. JOHNSON, M. D.

The importance of a correct diagnosis cannot be over-estimated. The reputation of the physician and the success with which he meets in practice depend, firstly, upon his ability to diagnosticate correctly. When the medical man attempts to prescribe for a patient without first determining the precise lesion, or functional derangement, he is groping in the dark, and is as likely to do harm as to remove the disease.

In order that a person may become skilled in the department of diagnosis, he must master the science of anatomy, that he may fully understand the particular organ or tissue affected. He must also have a thorough knowledge of physiology, that he may be able to compare the normal functions of the various organs and tissues of the human body with those that are pathological, and thereby be enabled to determine the exact deviation from the standard of health.

In a general consideration of medical diagnosis, it will be necessary, not only to view the morbid states met with in the examination of patients, but to inquire in what manner they may be most readily recognized, and how their difference may be made perceptible in the discrimination of one disease from another.

In a study of this kind, the examination of symptoms holds an important part. The detection of disease depends, firstly, upon a close observation of symptoms; and, secondly, in some cases, upon correct deduction from those symptoms.

To become a skillful diagnosticator, a certain amount of experience is necessary; but the knowledge obtained in books will aid very much in overcoming many of the difficulties with which we meet; they teach when and what to look for. There are some symptoms in most of diseases that would not escape the perception of the merest

tyro in medicine; and others that are more obscure, and will tax the skill of the ablest and most experienced physicians. It is in finding out these intricate and obscure symptoms that profound medical information, as well as cultivated tact, is demanded.

To be able to understand the manifestations of disease, whether they be readily perceptible or less easily understood, we have to employ the senses of seeing, hearing, smelling and feeling; and the more acute those perceptions the better. Indeed, physicians in the earlier periods of the history of medicine, relied almost entirely upon their unaided senses in determining the various pathological conditions.

But, during the past half century, science has been brought to bear upon the subject of medicine to a remarkable extent; and the diagnostician has felt and appreciated its utilizing power. By its aid, diseases that were hitherto involved in doubt and obscurity, are now most satisfactorily understood and explained. By repeated and scientific experiments, the exact functions, use, and action of the various organs of the human body have been positively determined.

By the use of the thermometer, are registered the exact heat in different parts of the body, the different temperature in various diseases, and its variations in the same. Systematic thermometrical observations reveal to the practitioner, at the present time, in certain forms of fever, the gravity, severity, and danger of their cases.

The microscope brings to our view certain pathological conditions and diseases, that the unaided vision would forever fail to perceive. There are many cases that would remain in doubt and uncertainty were it not for the revelations of microscopical examinations.

The great improvements that have been made in chemistry during the past few years, render that science of the utmost importance, as a means of acquiring a complete knowledge of certain diseases. Laennec, by the invention of the stethoscope, and the discoveries which he made in the art of auscultation and percussion opened a new era in the domains of medicine. By its aid, the internal vital organs may be examined, and their pathological condition positively determined. Previous to the discovery and perfection of this art, diseases of the heart and lungs were determined by their symptoms alone, and that knowledge was often very unreliable; but by the aid of this beautiful science, organic and valvular diseases of the heart, as well as structural diseases of the lungs may be at once detected.

By means of the use of the sponge-tent, uterine sound and specu-

lum, the gynecologist is enabled to diagnosticate correctly the various functional diseases that are so common among American women; and by the employment of other modern instruments, with the judicious use of remedies, he is able to radically cure the largest share of the uterine diseases that render the lives of so many women miserable.

The manifold improvements in the methods of investigating disease, give the practitioner of to-day a decided advantage over those of former years; as we arrive at conclusions with scientific certainty, while theirs were in many cases mere guess-work.

The progress that has been made in medical diagnosis during the last half century, has far exceeded that of any former equal period; the high degree of perfection which it has attained being highly creditable to the profession.

However acute the senses and the perceptive faculties may be, they cannot fully supersede or do away with the necessity of the exercise of other powers of an equal if not of a higher order. I refer to those of judgment, reason, and comparison. Perception takes cognizance of symptoms and facts, which serve as data for the operation of reason. A general knowledge of disease would of course be indispensable. Then by grouping together the various symptoms, and by means of an inductive system of reasoning and comparison, the precise lesion may be determined.

Reasoning upon ascertained facts alone, as a basis, is not always all that is necessary. The premises of our reasoning may be but probabilities; for the truth is, diagnosis depends sometimes as much upon reasoning from probabilities as a basis, as from positive fact.

The recorded clinical experience of the world is before us, and is of immense advantage, especially to the inexperienced; enabling them to give to each and every symptom, its due weight and influence, in arriving at a conclusion as to the particular disease.

After gleaning all that is possible from the accumulated wisdom and experience of the medical authorities, there yet remains much for the practitioner to work out for himself. There are but few symptoms but that may be due to several and different causes, and there are fewer still, that are pathognomonic of any certain disease. The proper way of arriving at truth, in an individual case, is by comparing the symptoms, signs and circumstances, and harmonizing them with each other. Certain symptoms would lead us to suspect specific disease. If we find, upon a rigid examination, certain symptoms

present, inconsistent with the supposed disease, we must dismiss that, and seek another; and not until we find perfect harmony and consistency in every particular, can we rest assured that our diagnosis is correct.

Cases, as we find them in practice, are quite frequently complicated, and to succeed well, the physician should be a pathologist in the broadest sense of the term. We should understand the antagonism between different diseases, the frequency with which they co-exist, and the influence of remedies upon them.

As to the mode of procedure, in the examination of cases, it seems very proper in the first place, to draw from the patient in his own language, as complete a history of his maladies as possible. The information we get in that manner, from an intelligent patient, is very reliable; then by a series of catechism, the history and symptoms may be fully understood. After one disease has been discovered, its character, severity and duration are fully determined, the case should, not be rested there, but a full and comprehensive examination should be instituted to detect any other disease or diseases, should they exist.

A method sometimes pursued in diagnosis, is to find out what the patient has not got. The various diseases capable of producing some or all of the symptoms manifested in the case, are enumerated. They are examined one by one, and set aside until the right one is reached. This is an indirect way to arrive at the truth; and to make it a correct one, all pathological conditions which give rise to the symptoms met with, must be examined, otherwise, our conclusions might be false; therefore, it is not usually employed, except in rare and difficult cases.

Notwithstanding the great improvements that have been made in the art of diagnosis, and the perfection to which that science has attained, there are some cases that the most skillful and experienced diagnostician will fail to unravel. Firstly, the patient may fail, either intentionally or unintentionally, in giving an accurate history of their case. Secondly, the disease may be so rare, that its symptoms are not generally understood; and thirdly, there may be several lesions present, each modifying and influencing the other.

In hysteria, patients are disposed to magnify their trouble, partly, because they imagine that they are worse than they really are; and partly because they desire the sympathy of those around them. In the army, certain men, for the sake of securing their discharge, will feign sickness, such as rheumatism, neuralgia, etc., but as a rule,

patients will not intentionally deceive the physician, because they are themselves as anxious to regain health as is their medical attendant.

There are some diseases, the symptoms of which in their incipient stages are so very similar, that in some cases we might be unable to determine which affection we have to deal with. But as the disease advances, symptoms arise by which we are able to set the matter right. Some cases of typhoid fever and brain diseases are so nearly allied in the first stages, as to make a positive diagnosis quite difficult.

In this class of cases, we have to treat symptoms upon the expectant plan, to wait patiently and watch carefully for the development of symptoms, which may serve as a key to unlock the secret and distinguish the disease.

There is no subject which engages the attention of man, that is of greater importance to the human family than that of medicine; and each of the branches connected with this science, should receive due importance. Should we be able to judge correctly of disease, assign its cause, and trace its pathology, and at the same time be unable for want of knowledge, to apply the remedy to remove disease, the final object of our investigations will be unattained.

STUDY UPON ANTHROPOLOGY.

READ BEFORE THE MEETING OF THE ECLECTIC MEDICAL SOCIETY OF THE THIRTY-SECOND DISTRICT OF NEW YORK, HELD AT MAYVILLE, MAY 24TH, 1871.

BY PHINEAS SAGE, M. D.

If we accept the Bible as testimony, matter was created by God out of nothing, which to us is incomprehensible and impossible. [Where does the Bible say this?]

The Bible history of man is that he was formed from matter previously created by God, but remained inanimate until the Lord God breathed into his nostrils the breath of life and became a living soul. The union of mature intellect with matter constituted man in the beginning, and some infer from this passage that mind cannot exist independently of matter, and that when the material body dies the mind dies also. This would be infidelity and should not be believed.

Man had a beginning, both mentally and physically, and creative power saw fit to make the union of mature intellect and matter a necessity in the first pair, and by them life or intellect could be reproduced only in conjunction with matter. The first pair received life or intellect from God himself, but subsequently life was transmitted from direct parentage.

Man is endowed by the Creator with self-control or direction over the reproductive process, but not without a limit. Hence, the transmission of mental and physical qualities depends largely on the will or desires of the parents. The first pair came from the hand of the Creator perfect, but in consequence of their departure from that mental perfection given them, their first offspring were diametrically opposite in character, one a murderer and the other a righteous man.

This fact of being decidedly opposite in character is proof conclusive that the parental mind was correspondingly different before and during gestation.

These opposite characters emanated from the same parents. From this fact the question arises how they could have transmitted such a wide difference in the two, had it not been under their mental control or influence. Cain killed his inoffensive brother because his offerings were acceptable with God. This act proves the doctrine of inheritance, or else sin originated with Cain.

The sinful disposition seems to have been transmitted to posterity to such a fearful extent that it brought down a general deluge as a penalty, and all perished save eight souls, one or more of whom possessed the mixed character, and entered the ark. In reading the record we find the first couple happy, and living from the fruits of the garden of Eden until their transgression; then their happiness was disturbed, and they saw themselves in a nude state, but being endowed by the Creator with mechanical genius (or else necessity originated the talent), aprons from fig-leaves were soon constructed.

Here was the first exhibition of mechanical skill to an assembled world.

It is reasonable to suppose, that man in the beginning was endowed with the ability only to progress in intellect as circumstances demanded; for full provisions were made for his maintenance in Eden.

At this period, from necessity, intellect and genius began to expand, from the fig-leaf apron to implements of husbandry, or starvation would ensue; and, from this, to the building of the ark, or Noah and his family would have gone down with the antediluvians.

It is not even probable that our first parents received from God all the constructive powers that Noah and his mechanics possessed at the building of the ark.

Then how came they by that advanced ability? Upon no other principle than that man was created a progressive being, and transmits to his offspring ambition for still higher attainments.

Therefore, every couple ambitious for advancement in mental capacity, transmit to their progeny mental qualities as well as physical structure commensurate with their highest ambition.

There are instances, however, of great intellects appearing on earth where the parents were wholly ignorant, and had not a thought why one member of a family should be possessed of superior ability.

These rare cases reflect no credit upon the parents, for the act was done unconsciously, but in accordance with the law governing the process of transmitting to their offspring mind. Could this law be

well understood and studiously observed, prodigies would be found in every school-room, solving problems without study. Invalids would be unheard of; dwarfs, idiots and disease would be unknown. But man is more studious and ambitious in the improvement of his stock than of his own species.

In this country, where the protestant religion is generally acknowledged, the Bible is the highest authority known to its citizens. By this we are informed that as far back as 1745 years B. C., the old patriarch, Jacob, resorted to the mentulity of the beasts to change the color of their offspring.

In his policy to become rich by tending and feeding Laban's flocks, he bargained with him to take for his pay all the ring-streaked, speckled and spotted he could raise from that part of Laban's flocks of a single color. Laban being ignorant of Jacob's process, readily agreed, by saying: "Be it according to thy word."

Laban then selected out all the ring-streaked, spotted and speckled, and every one that had any white on it, and all the brown, and, with his sons, sent them off three days' journey from where Jacob was to tend and feed the remainder of his flocks. Jacob commenced his task with but little prospect of any pay for his services in the minds of every one except himself; but no fear was manifest in him but that a large increase of spotted cattle would be his remuneration.

To accomplish his object, he took "rods of green poplar, some hazel and chestnut tree, and pilled white streakes in them, and set them in the gutters by the watering-troughs, that when the flocks came to drink they would conceive."

"And the flocks conceived before the rods, and brought forth cattle ring-streaked, speckled and spotted."

This singular bargain of Jacob with Laban would not have been consummated had not Jacob observed this law of mental impression previous to making this contract, for he had no promise of remuneration only in its success.

This law of mental impression in Jacob's process did not abrogate the law of "similia similibus" in form or shape, but was confined to color only, and was a success in that. It is very evident that there are laws of nature which govern the reproductive process of both the material and mental condition. A successful stock-grower, like Jacob of old, understands this law of mental influence over the progeny of the beast; but how few there are who have a thought of its application to the race of man. He wonders at his offspring not being of

the highest order of intellect, and giants in physical structure. He is blind to his own responsibilities, and supinely charges it to an all-wise Creator, while he alone is responsible.

If man would pay the attention to the reproduction of his own race that he does to his stock even, he would not be cursed with an undesirable offspring.

In studying the law of reproduction, we first notice that neither the physical or mental man can be reproduced separate either from the other, and however great the mental may be, it can manifest itself only through a correspondingly large, healthy, physical organization. How important, then, that the law for the reproduction of the most perfect and healthful physical structure be well understood.

William Byrd Powell is the author of a work on this subject, and it should be in the hands of every person contemplating marriage, although there may be discrepancies in his conclusions, some of which I will refer to.

He classifies the bilious and sanguine temperaments as vital; the encephalic and lymphatic as the non-vital. He asserts that the non-vital came with man into existence; that the non-vital is acquired by or originated through the agency of civilization; and that with all marriages contracted with the hope of a sound and usefully constituted progeny, one of the parties must be vital, and the other non-vital. That if the parties in marriage are respectively of a vital or non-vital temperament, sterility is the consequence.

The question arises, by an investigation of this theory, that if the non-vital temperament originated from the influences of civilization, there was a time when there was no such temperament; and if there was, there must have been a time when man could not reproduce his own species; for he says, if the vital or non-vital exists in both parties, there can be no reproduction.

In proof of his theory, that the non-vital temperament originated through the influences of civilization, he says: "I have been much amongst our primitive peoples (the Indians); I have found no lymph amongst them." In them, then, he found wanting one of the temperaments so essential to procreation. Civilization had not yet given them one of the most important requisites for reproduction.

He says of the encephalic temperament, that "care, study, mental activity, reponsibility and sedentary habits, are as exclusively incidental to civilization as is wealth, and the first four conditions develop the cerebrum, and the last reduces, or does not develop it,

and thus that organic condition which constitutes the encephalic temperament is produced." "I have never observed this condition amongst our Indians even partially developed."

In this last statement we find that the encephalic temperament is not even partially developed amongst our Indians. Their aversion to that which causes that temperament in civilization, prevents its possession by them.

If, then, our Indians are deficient entirely, as above stated, in the encephalic and lymphatic temperament, and the two are the non-vital temperaments, one of which is absolutely necessary to one of the parties in marriage, how can the Indians propagate their race? The Indians are entirely deficient in the non-vital temperaments, still they multiply.

I am not disposed to criticise for the sake of argument; but when I read the writings of such a progressive thinker as Prof. Powell, I read to learn; and when I find his theory adopted and republished in our medical journals, I am led to distrust my own criticisms and ask for an explanation of this part of his theory.

To originate a temperament through the influences of civilization would seem very improbable, if not impossible. But that man is endowed from the beginning with the four temperaments, subject to improvements, but not to the creation of a new temperament, appears to me more reasonable. If civilization can create a new temperament, by the same law a temperament can be annihilated.

If compatible temperaments marry, the temperament, physical structure and mental capacity of all the offspring would be alike, if the doctrine of compatibility of temperament be the governing principle to marriageable parties. Variations from perfect likenesses in the offspring proves the fallacy of the doctrine of compatibility of temperament being the only guide to marriage alliances. It only proves that the mental influence of the parentage upon the offspring is paramount to that of compatibility of temperament, for we find distinctly opposite temperament, physical structure and varied mental capacities in the same family and from the same parentage.

The parental mind, through earnest desire, excessive anxiety, or excitement prior to and during gestation, has much to do with the formation of the coming offspring, both mentally and physically. The "nævus maternus" is the result of mental influence upon the physical structure in fœtal life. To what extent may this not be carried by cultivation? There is a principle in this that might seem miracu-

lous if properly directed. When we see an effect from any cause, we may make use of the process producing the effect to our advantage, benefit and instruction, if we can determine how to control it. I call your attention to this one point, which I will discuss at some other meeting.

A greater mental influence of the parentage upon the progeny is manifest in the mental capacity of the offspring than in the physical structure.

Some of the most striking illustrations of the parental mind acting upon the offspring is found in the transmission of a great intellect. Some writers urge the necessity of a very early training of the young mind to assure depth of intellect. From infancy, say they, they should remember that if tares are sown, after-culture cannot change them to wheat.

The education and training of the new mind should commence prior to infancy, prior to embryonic life, prior to conception even. It should commence in the parental mind. Train the intellect of the coveted offspring in the parental mind prior to conception. Preparation for any earthly undertaking is the practice of man. He prepares his ground to the best of his ability before the seeds are sown. He is not careless or unthoughtful in this; for a large yield is wholly dependent upon this and a suitable quality of seed.

The same principles of cultivation hold good in the reproduction of animal matter and mental life that governs in the vegetable reproduction. An intelligent reproduction in man might be carried or advanced so far as to replace our present race of dwarfs in physical stature with giants, and our ignorance with an intuitive knowledge and comprehension of the whole planetary system as well as that of spiritual life. The mysterious future would be unvailed. A perfect knowledge of all things pertaining to this life and the first era in the future would become a part of the human mind, not by study, but as by intuitive perception.

Now man's association and intercourse with the opposite sex is inferior and beneath that of the brute. This seems to be a strong statement. Let us look at it.

It is a libel upon the brute to charge man with being brutish or beastly in his intercourse with the opposite sex. Where are the examples of a promiscuous cohabitation with any of the brute creation? Where are the examples of the fighting and killing of the opposite sex, with any of the brutes, as a general rule. Man, for

whom the brute was created, would not allow it in his own farmyard; but he, the superior in creation, will practice promiscuous and untimely cohabitation, to his degradation and misery; will fight and even kill the opposite sex. Reform in this, then, is the first step in a cultivated reproduction.

The intellect of the offspring reflects a transmitted condition of the parents in proportion to their ambition for higher qualities. We must sow wheat if we expect wheat in return; then after-culture is always proper to secure a large growth.

The intellectual capacity of the offspring is always commensurate with the highest ambition of the parents, unless prevented by their own violations of immutable law governing transmission of qualities. The growth of intellect, from infancy to manhood, bears no comparison to that which may be transmitted by a proper exercise of the parental mind prior to conception and during gestation. The sturdy oak may spring from the ground, but the germ for its greatness is in the little acorn. A Napoleon came upon earth a prodigy in warfare, but came not by chance with his advanced ability. The germ of all his strength of intellect existed in the mentality and ambition of his parents prior to his conception, although they may have been unconscious of any power in themselves to transmit any part thereof that should produce a mighty intellect. He was born in accordance with immutable law governing the transmission of quality, and he could be no less than what he really was. A great mind never came upon earth through Providential interference, or for a specific purpose. The greatness of the offspring is under the control of the parentage, but the greater the intellect of the parents when exercising this control, the greater the intellect of the progeny.

Governments stumble when they attempt to maintain the standard of intellect in a royal family, by intermarriage with royal blood only. Ignorance of the laws of transmission and reproduction will produce inferior intellect and constitution from royal blood as certainly as from any other, although blood relations may be compatible for marriage. Custom and statutory law declares and recognizes all born of the same parents to be brothers and sisters. This may be good law or custom for the adjudication of estates, but for social relation they may be as opposite as Cain and Abel were. That text declaring Abel to be a brother of Cain, proves not that they were related mentally. It is but an ancient or Mosaic name for two males born of the same parents. Cain and Abel were no more akin

mentally than was Christ to Satan at the time that Satan offered him all the kingdoms of this world if he would fall down and worship him. We are kindred by temperament and love only; although legislation makes no distinction for temperament, constitutional or mental compatibility.

A closer relationship exists, or ought to exist, between husband and wife than between brothers, but the marriage ceremony does not make them related. It is only to satisfy legislation. Legislation recognizes any constitutional condition as compatible and eligible to marriage in persons who chance to contract through amorous desire to be man and wife according to law.

The scrofulous, the deformed and the syphilitic, have the right in law to contract marriage with the healthy and innocent. The legal or religious official, at the bridal altar, only asks the candidates if they promise to love, protect and obey each the other, and of the witnesses, if they have any objection, and if not uttered, forever after hold their peace. Having said this, the two are pronounced "husband and wife."

Bigamy, disease and death, may be the consequence of this almost unlimited right in law to marry.

In conclusion, I will give it as my opinion without fear of contradiction that the great moral, intellectual or religious millenium can never be reached only through a highly moral and intellectual direction of the reproductive agency.

With this a new era in mental progression would dawn upon the world and the dark labyrinths of mental ambition would be lighted up with the inspirations of the higher spheres. Death, now darkened by ignorance, would lose its ghastly dimensions, and would be transformed into a beacon light to the brief sojourner of time, to the great and broad sea of the future.

MEDICAL PURSUITS.

READ BEFORE THE ECLECTIC MEDICAL SOCIETY, THIRTY-SECOND SENATORIAL DISTRICT, JANUARY 3D, 1871.

By A. S. Davis, M. D., Fredonia, Chautauqua County.

Whenever the exigencies of a time have demanded the service of extraordinary talent, there has arisen, as though for that end alone, some master spirit; and by his achievements, obstacles have been vanquished, science advanced, nations delivered. Hippocrates placed medicine in the category of sciences, rescuing it in a great degree from charlatans and mere unlettered pretenders. Of course, he could not make it exactly like the mathematics, but he prepared with great fidelity a description of diseases, so far as they were known at the time, and his modes of diagnosis have hardly been surpassed. For long generations afterward, his writings found numerous admirers; but little addition was made to the structure which he had upreared. It was not left untenanted, but it was certainly unadorned for some twenty centuries.

Harvey then demonstrated and announced the circulation of the blood. This event constituted, indeed, a new era in medical knowledge. Before this, much that was taught and written was principally speculative and theoretical, plausible hypothesis, which observation afterward showed to be fallacies. Progress, under such conditions, was slow and uncertain. But now took place, real and marked improvement.

The study of anatomy was prosecuted with redoubled interest; from which also proceeded a new impulse to the entire science of medicine. The knowledge of the circle of motion by which the fluids are impelled from the center of the body to the extremities, and returned thence to be again sent forth on their errand, vivifying every particle of which the human frame is composed, tended directly to stimulate research in every direction, which could aid in adding to science.

But our indebtedness is not to the past centuries alone. The inquirers of our own time have added their rich contributions, and given us the different themes of nutrition, absorption, secretion, innervation, colorification; in short, all the phenomena pertaining to human life, its evolving, sustenance, and whatever constitutes vigor, pleasure, and courage to the individual.

We have also been enabled to perfect our system of diagnosis, so that a large number of diseases of internal organs, heretofore obscure and regarded as incurable, the *opprobria medicorum* are well understood and effectually treated. Auscultation and percussion serve to give us, through the medium of sound and touch, vivid and correct impressions of internal lesions, training our auditory and tactile senses to great acuteness.

Pathology itself is sharing in the advantages of modern discovery. The microscope has given its aid, and we now learn of changes which disease is producing in the physical structure, that formerly eluded the most careful scrutiny. We cannot praise too warmly the service rendered by this efficient handmaid of knowledge.

Absolute perfection, of course, is not to be expected; but what improvement and amelioration we may of right anticipate from the enlightened endeavors of physicians thoroughly instructed in diagnosis, familiar with the lesions which they are required to treat, as a mariner is with the rocks and shoals indicated on his chart, and possessing approved remedial agents adequate for the various diseases that are enumerated. And yet, with all the knowledge possessed by the medical profession, all that has been learned particularly by our new school, of vegetable remedies and the approved methods of preparing them, the improved modes of treating the sick and the more frequent cure of their maladies, the peculiar excellence of the medical art lies far less in this ability than in what is known of the means of avoiding disease.

To the philanthropy of the medical profession the people are indebted for those suggestions which have enabled communities to adopt those effective sanitary regulations which now protect our cities and towns from devastation by pestilence, once so frequent and destructive. The general principles of hygiene, which are now so generally understood and universally acknowledged, even by unprofessional persons, are the fruit of innumerable experiments and investigations by members of that profession; labors rendered without ostestation, silently, and yet of inappreciable value.

The achievements of surgery, now effecting the preservation of life where once it was sacrificed; and the discovery of anasthæsia, by which so much suffering is escaped as well as abated, are boons of priceless worth. It is almost a mark of supererogation to speak of these; to attempt to portray the benefits thus conferred upon sufferers; to enumerate valuable lives thus prolonged; to depict the inconceivable amount of anguish abridged, subdued, annihilated. But we are human beings, and it seems to be an infirmity incident to our nature to undervalue the richest boons when they are scattered abundantly around us. Myriads and millions of intelligent creatures inhabit the earth, but how few apprehend the source of that genial vital warmth which permeates all organized substance. The gifts of providence, the light and life-sustaining actinism of the sun, the balmy breath of the atmosphere, are shared alike by the grateful and the thankless, none of whom, without them, could ever exist. The lengthening of the term of human life, exemption from many of the ravages of disease and physical suffering, are boons which the medical profession have conferred upon men; the benefits of which will be enjoyed by themselves and will descend as an inheritance to posterity. Is it not our right, as well as privilege, to magnify our vocation?

And now, for a few moments, we will turn our attention to a subject which we have all often been required to contemplate; the death-bed scene. Often have our hearts been made to mourn, when all our skill, and the skill of eminent counsel, have been exhausted, death has borne away the spirit, leaving with us but the lifeless corpse. Many of us have witnessed numerous scenes like this that have made deep impressions. In the beautiful language of a well-known writer, we can truly say: "The sweetest, the most sacred associations, are indissolubly connected with the persons of those we love." It is with the corporeal frame that our senses have been familiar; upon it we have gazed, often with pleasureable rapture; it has been the medium of conveying to our hearts the thrill of delight. We cannot separate the idea of the peculiarities and actions of a friend from the remembrance of his personal aspect; and for this reason everything which has been associated with him acquires value from that fact; his ring, his book, his watch, his habitation. The value of these, because they have been owned by him, is not fictitious or merely imaginary; they have an influence upon my mind; they can give me delight or make me suffer; they can agitate and they can tranquilize; they can change me and make me like the man whom I love.

It is not necessary to be told, after disease has completed its work, and death has seized its prey, that that body with which are connected so many delightful remembrances, is senseless matter; that it is no longer my friend, that the spirit that animated it and rendered it lovely to my sight and dear to my affection, is gone. I know that I never more shall see the light of intelligence brighten that countenance, nor benevolence beam in that eye, nor the voice of affection sound from those lips; that which I loved and which loved me is not here, yet here are still the features of my friend; this is his form, and the very particles of matter which composes this dull mass, a few hours ago were to me a real part of him, and I cannot separate them in my imagination from him; I approach them with profounder reverence, I gaze upon them with deeper affection, because they are all that remain to me. I would even give what I possess to purchase the art of preserving this form as it was in life, that it might be with me still, but I cannot detain it from the tomb. Yet, even when I have cast a heap of mould upon it, I visit the spot where it is deposited with awe; it is sacred to my imagination, it is dear to my heart.

None have asked professional aid at our hands in vain; though they have not a farthing to pay us did we ever turn a deaf ear to their call? How often, in the dead hour of the night, have we risen from our warm beds, regardless of our own ease, and, though the night was ever so dark and gloomy, rode many a weary mile to minister to them in their distress and anguish? How often have we passed whole nights of watching at the bedside of the humble poor as well as the rich, disregarding fatigue and hunger, and having no other prospect of reward than an approving conscience, knowing that we had discharged the duty which our profession imposes?

There is one more point to which I wish to call your attention; among the more important aids to self-improvement, let us assidulously cultivate habits of close observation; never pass unheedingly by a new plant, stone, or insect even. If we stifle curiosity once we may the more easily do it the second time. He who yields to indolence, saying "I can't find leisure to dabble in geology, or mineralogy, or entomology, or animal chemistry," will soon acquire habits disqualifying him for observing closely the symptoms of disease. The person who never is content to *guess* where he may know, who investigates everything, however dumb to the *careless* ear, will acquire habits of attention, observation and reflection, of inestimable value in sustaining the laws of life and the phenomena of disease. The ear that is kept carefully

attuned for natures' harmonies, is the first to note discords and seek for their cause.

Listen to the soft rustling of the green forest leaves, when stirred by the zephyrs of June. Listen again to the same forest, when its leaves have grown sere and yellow by age and autumnal frosts, rattle and chafe roughly in the blasts of October, and you will learn to observe a difference in the fainter sounds; and he who inquires of nature the causes of that difference, will receive a true answer, and be wiser for his curiosity. An ear thus trained, comes to professional labor, a practiced instrument, and listens intelligently to the sounds of respiration, to cardiac and arterial murmurs and the rhythm.

Think you, that Dr. Austin Flint's essay on Variations of Pitch in Percussion and Auscultation, and Application to Physical Diagnosis, would have been deemed worthy of the prize awarded by the American Medical Association, a few years ago, if he had not listened attentively to nature's still small voices?

The falling snow "tells the story of its birth," and listening to its music, he might have become able to judge with probable accuracy the hygrometrical condition of those strata of the atmosphere, where snowflakes were formed; and of those through which they had fallen, as when their keen stellated points rang, and cracked in alighting from their airy flight, the reflecting mind might be assured that zero was not far off at their birth. And again, when they fall like "feathers of down," and make a hush of music, so subdued that even the most attentive ear, hears nature's voice pronounce them "snow not small rain," in her softest whisper. These illustrations may seem trivial and unimportant, yet knowledge is only acquired by attention to facts, however trifling and unimportant they may seem; and he who obtains it in any other way, takes it at second hand.

Is it any wonder that the man who has never observed but one kind of moss, or he who neither knows or cares, that the natural family of fungi contains more than twelve hundred distinct species, which have been already known and described, should call all eruptive diseases erysipelas or salt rheum, scrofula or itch; or that he should excuse his ignorance by the sweeping declaration that all else in the nosology of skin diseases is *terra incognita*, except exanthematous fevers. But then every one has learned to know by sight, thanks to Sydenham for his close attention and accurate observation. Before his time, nobody knew measles from scarlatina.

New facts are constantly appearing under the scalpel and micro-

scope of modern explorers, often in old and abandoned fields of research. Let all these discoveries be subjected to a careful scrutiny and analysis, in order to determine what is good and what is valueless dross.

New theories, are not true because they are new, and may fail to harmonize with known truths; yet every truth in science, agrees with every other truth.

As we travel together like that little band of disciples of our great Master, we are often interrogated of our character and merits as he was: "Art Thou the Messiah, or is He yet to come?" Let us say to them as He did: "Go tell John, the sick are healed, the lame walk, the dead are raised, and the ears of the deaf are unstopped; and to the poor, the gospel of health is preached."

In the dim vista of remote antiquity, we see glorious "men walking as gods," worshiped by the sons, whose fathers they had lived to benefit, and toiled to heal."

Æsculapius received adoration as the divine healer. Hippocrates merited a statue; and, perhaps, we who labor faithfully in the same vocation, may deserve the well wishes of a considerate public.

Acknowledging the brotherhood of man, and the golden rule, let us do our proper work earnestly and thoroughly, leaving the world better than we find it. With the consciousness of having acted well our part, honored our profession and our manhood, we are able calmly to await the verdict of those whom we have served.

FREDONIA, N. Y.

DUST AND CONTAGION.

By Alexander Wilder.

The annoyance of every housewife is the dust that collects over her domicil, furniture and clothing. No portal is so close as to shut out the intruder. Though an apartment be closed almost hermetically, and remain so for a long period, the first person entering is sure to encounter dust in all parts and corners. Even the pyramids of Egypt, the temples of an obsolete religion, built and sealed up by a forgotten people, constitute no exception; while the tombs and vaults in the country of Chemi, where mummies have lain in their cerements and sarcophagi for untold ages, abound with the impalpable powder. When the traveler, Belzoni, made his explorations in the mummy caves he was often half stifled with the dust, which was of such extraordinary fineness that it seemed to insinuate its way to the minuter and profounder air-cells of the lungs. Yet it must be excluded and expelled, or a fatal result would surely ensue.

Preposterous as it may seem, the production of dust is not, in all particulars, an easy matter to explain. We may, to be sure, be able to cite the pulverized earth of our highways, and the minute particles which abound in manufactories. But this is a very small part of the quantity evolved. One has but to lie down in a place imperfectly lighted, in some retired apartment, an unused barn, or even a cave below the surface of the earth; the instant that a ray of sunlight enters, the air will be seen all in motion, with innumerable motes flying in every direction.

Physicists inform us that the atmosphere, to the altitude of miles above the surface of the earth, is, in like manner, filled with circulating dust. Perchance, also, it pervades the æther in which the planets move and solar system revolve, and their incessant motion keeps it in agitation and sends it in immense waves over all the worlds and heavenly bodies. This is, however, a far-drawn surmise, permissible only because we find the dust to be as universal as existence, and almost as ubiquitous. Whether it is needful as the supporter of physical life, or what its real function is, will require much

study and investigation to ascertain. Whether it is the contribution of the æther or the comets to supply the waste material which our worlds are ever casting off, or whether it is itself such debris, is also a curious question.

Whatever the uses of dust, many of its inflictions are great annoyances. We will drop all speculations beyond our own mundane sphere, and not perplex ourselves about star-dust and other celestial impalpabilities. Here on earth, in our towns and cities, we find it often mischievous, destroying our health as well as our clothing. It will require many pages to instance the evils which it inflicts in the way of diseases.

Pathologists have conjectured that the spores of yellow fever and other maladies are borne upon it, and deposited on some unlucky person, like the seed attached to the thistle-down. Cholera and other epidemics, especially those which indicate the presence of a poison acting zymotically, are very likely to be propagated in such a manner. The inhalation of dust on a highway over which a cholera patient has walked, or where he has encamped, has been supposed to communicate the contagion, and the opinion certainly is plausible.

Diseases of the eyes, nasal passages, throat, bronchi and lungs, are often thus occasioned. The ophthalmia of Egypt, a most malignant complaint, is attributed to inflammation set up by the irritation of dust blown into the eyes. Ozœna, schneiderian inflammation, hay fever, and other diseases of the pituitary membrane, are commonly incited in the same manner. The dust excreted from plants had long been supposed to produce schneiderian catarrh and hay fever. Daniel Webster was a life-long sufferer in this way, and Henry Ward Beecher is also credited with a like disorder; Ex-mayor William F. Havemeyer, of the city of New York, was reported in a newspaper several years ago to have been repeatedly afflicted with the complaint, and to have procured for himself immunity from it for one entire season by wearing goggles during the forepart of summer. The writer has himself been repeatedly charged with having incipient consumption ever since attaining his majority, but has never yet found good reason for supposing that phthisis had "marked him for her own;" but he has very often noted the effects produced on him when dust driven by the wind had entered his eyes, and when he had inhaled noxious material in the air. Overflowing moisture of the eyes, dimmed vision, excessive and sometimes purulent secretion of the schneiderian and pituitary membranes, profuse expectoration, with

frequent sneezing, degenerating into the "churchyard cough," have been familiar visitors when thus invited. He has learned, from dearly-bought experience, that when dust is blown into his eyes on a windy day he must expect in a few hours an attack of all the symptoms of cold in the head, and irritability of the fauces, and an expectoration copious enough apparently to indicate a speedy transit from this every day world. But these attacks subside; the attending feverishness and debility go with them, bearing evidence that the summons had not yet come.

Dr. Wood alludes to this subject, volume I, p. 793: "Other causes are heated air, acrid gases or vapors, and irritating powders inhaled into the lungs. In some persons the disease is produced by peculiar exhalations, which do not affect men in general. Thus the powder of ipecacuanha occasionally excites violent bronchial inflammation when inhaled."

English writers speak of a peculiar catarrhal affection, called in Great Britain "*the hay asthma*," which occurs in some susceptible individuals about the period of mowing, in May and June, and is ascribed to the exhalation from a certain kind of grass when cut. The complaint is often very severe, involving the whole of the air-passages, and requiring removal from the sphere of the supposed cause in those exposed to its attacks.

The air exhaled from the furnaces used in heating houses is often a source of contagion. The State Capitol at Albany is so heated, and every winter is a hot-bed of disease; catarrh and influenza prevail as epidemics during the sessions of the Legislature, and many members have contracted bronchial and pulmonary disease which sent them home to die. The first floor of the Delevan House, in that city, when heated in the winter, is hardly less unwholesome than the Capitol.

As this complaint is a common one we will pause to give it a more definite description. It is known as bronchitis, catarrhal fever, and as catarrhal consumption. The symptoms are not uniform in different individuals, but exhibit considerable variety. Uneducated persons suppose them very dangerous, and prognosticating speedily fatal results; yet patients have suffered for years, and even till old age; dying, perhaps, of something else than phthisis. Often the only observable symptoms are a slight cough and moderate expectoration, which, after lasting a considerable time, either gradually cease, or become aggravated so as to excite the solicitude of the patient. They often diminish or disappear in the summer; and, again, they increase in summer and diminish or disappear with the rains of autumn.

"Severer cases are not uncommon," says Dr. Wood, "in which there is a troublesome cough, usually attended with expectoration, sometimes scanty and difficult, and sometimes easy and copious, of a thick, somewhat tenacious, opaque mucus, whitish yellowish or greenish; sometimes streaked with blood, and frequently mixed with larger quantities of a thinner and more transparent, ropy liquid, probably the result of a more recent inflammation, either supervening upon the old or occupying a different part of the lungs. In some instances small, whitish, opaque, solid particles are mixed with the sputa, which have by some been considered as tuberculous matter, but which, according to Andral, are nothing more than the concrete secretion of mucous follicles in the fauces. The cough is usually most severe, and the expectoration most copious in the morning. It is occasionally attended with pain, soreness, heat, and some degree of tightness in the chest; but these symptoms are not common, unless as consequences of new accessions of inflammation."

The Homœopathic remedy for the affection would be sulphur. We have had excellent results from using a mixture of syrup of squills, tincture of cohosh, tincture of sanguinaria and paregoric. We employ no formula, having generally found it better to combine medicines specifically in each individual case; but it is important to break up the peculiar habit of living. In a patient not addicted to the use of alcohol, whiskey can be occasionally employed with advantage; tonic baths and tepid baths, with much hand rubbing, are valuable, and good feeding is better than all. Half the diseases could be got over with far less trouble and suffering if the patients were fed judiciously and medicated less.

Henry Clay was a sufferer from the complaint just described. He relieved it by the use of snuff and the cautious employment of alcoholic beverages; but finally it invaded the lungs, and his vigor being impaired by years, he finally succumbed. In his case the inhalation of the dust with which Washington abounds was chargeable with the malady. William R. King, of Alabama, died shortly after becoming Vice-President of the United States from consumption induced by the same agency. Washington has been justly known as "the city of magnificent distances." The streets are too wide for paving or keeping swept, and the sidewalks are generally covered with dust, which every breeze drives about. It is not difficult to imagine that that is the occasion, rather than the unwholesome situation, of much of the

sickness which is contracted by persons sojourning at the national capital.

How far the mechanical irritation operates to produce the unwholesome results which we have noticed we are not prepared to say. Our own opinion is that the particles of dust are infected with morbid elements, or carry with them the spores of disease; and so, when inhaled or deposited on some sensitive surface, like the mucous membranes of the eye or nose, if the person is susceptible he is at once inoculated with the poisoning matter, and soon develops morbid symptoms of the character to which he is, from his peculiar diathesis, temperament or condition, most liable.

Professor John Tyndall, of London, instituted a series of experiments on this subject, the results of which he embodied in a lecture, afterward published in Fraser's Magazine. We collate from it the following paragraphs:

Solar light, in passing through a dark room, reveals its track by illuminating the dust floating in the air. "The sun," says Daniel Culverwell, "discovers atomes, though they be invisible by candlelight, and makes them dance naked in his beams."

The air of our London rooms is loaded with this organic dust; nor is the country air free from its pollution. However ordinary daylight may permit it to disguise itself, a sufficiently powerful beam causes the air in which the dust is suspended to appear as a semi-solid rather than as a gas. Nobody could, in the first instance, without repugnance, place the mouth at the illuminated focus of the electric beam and inhale the dirt revealed there. Nor is the disgust abolished by the reflection that, although we do not see the nastiness, we are drawing it in our lungs every hour and minute of our lives. There is no respite to this contact with dirt; and the wonder is, not that we should from time to time suffer from its presence, but that so small a portion of it would appear to be deadly to man.

And what is this portion? It was some time ago the current belief that epidemic diseases generally were propagated by a kind of malaria, which consisted of organic matter in a state of motor-decay; that when such matter was taken into the body through the lungs or skin, it had the power of spreading there the destroying poison which had attached itself. Such a spreading power was visibly exerted in the case of yeast. A little leaven was seen to leaven the whole lump; a mere speck of matter in this supposed state of decomposition being apparently competent to propagate indefinitely its own decay. Why should not

a bit of rotten malaria work in a similar manner within the human frame? In 1836 a very wonderful reply was made to this question. In that year, Cagniard de la Tour discovered the yeast plant, a living organism, which, when placed in a proper medium, feeds, grows and reproduces itself, and in this way carries on the process which we name fermentation. Fermentation was thus proved to be a product of life instead of a process of decay.

Schwann, of Berlin, discovered the yeast plant independently; and in February, 1837, he also announced the important result that, when a decoction of meat is effectually secured from ordinary air, and supplied solely with calcined air, putrefaction never sets in. Putrefaction, therefore, he affirms to be caused by something derived from the air, which something could be destroyed by a sufficiently high temperature. The experiments of Schwaun were repeated and confirmed by Helmholtz, Ure and Pasteur. But, as regards fermentation, the minds of chemists, influenced probably by the great authority of Gay-Lussac, who ascribed putrefaction to the action of oxygen, fell back upon the old notion of matter in a start of decay. It was not the living yeast plant, but the dead or dying parts of it, which, assailed by oxygen, produced the fermentation. This notion was finally exploded by Pasteur. He proved that the so-called "ferments" are not such; that the true ferments are organized beings which find in the reputed ferments their necessary food.

Side by side with these researches and discoveries, and fortified by them and others, he saw the *germ theory* of epidemic disease. The notion was expressed by Kircher and favored by Linnæus, that epidemic diseases are due to germs which float in the atmosphere, enter the body and produce disturbance by the development within the body of parasites. The strength of this theory consists in the perfect parallelism of the phenomena of contagious disease with those of life. As a planted acorn gives birth to an oak competent to produce a whole crop of acorns, each gifted with the power reproducing its parent tree; and as thus from a single seedling a whole forest may spring, so it is urged then epidemic diseases literally plant their seeds, grow, and shake abroad new germs, which, meeting in the human body their proper food and temperature, finally take possession of whole populations. Thus, Asiatic cholera, beginning in a small way in the Delta of the Ganges, contrived in seventeen years to spread itself over nearly the whole habitable world. The development from an infinitesimal speck of the virus of small-pox of a whole crop of

pustates, each charged with the original poison, is another illustration.

Surgeons have long known the danger of permitting air to enter an opened abscess. To prevent its entrance, they employ a tube called a cannula, to which is attached a sharp steel point called a trocar. They puncture with the steel point, and by gentle pressure, they force the pus through the cannula. It is necessary to be very careful in cleaning the instrument; and it is difficult to see how it can be cleansed by ordinary methods in air loaded with organic impurities, as we have proved our air to be. The instrument ought, in fact, to be made as hot as its temper will bear. But this is not done; and hence, notwithstanding all the surgeon's care, inflammation often sets in after the first operation, rendering necessary a second and a third. Rapid putrefaction is found to accompany this new inflammation. The pus, moreover, which was sweet at first and showed no trace of animal life, is now fetid, and swarming with active little organisms, called *vibrios*. Professor Lister contends that this rapid putrefaction and this astounding development of animal life, are due to the entry of germs into the abscess, during the first operation, and their subsequent nurture and development under favorable conditions of food and temperature.

The celebrated physiologist and physicist, Helmholtz, is attacked annually by hay-fever. From the twentieth of May to the end of June, he suffers from a catarrh of the upper air-passages, and he has found during this period, and at no other, that his nasal secretions are peopled by these vibrios. They appear to nestle by preference in the cavities and recesses of the nose, for a strong sneeze is necessary to dislodge them.

But let us return to our dust. It is needless to remark that it cannot be blown away by an ordinary bellows; or, more correctly, the place of the particles blown away, is in this case supplied by others ejected from the bellows, so that the track of the electric beam remains unimpaired. But if the nozzle of a good bellows be filled with cotton-wool, not too tightly packed, the air urged through the wool is filtered of its floating matter, and it then forms a clean band of darkness in the illuminated dust. This was the filter used by Schroeder in his experiments on spontaneous generation, and turned subsequently to account, in the excellent researches of Pasteur.

But by far the most interesting and important illustration of this filtering process is furnished by the human breath. "I fill my lungs

with ordinary air, and breathe through a glass tube across the electric beam The condensation of the aqueous vapor of the breath is shown by the formation of a luminous white cloud of delicate texture. It is necessary to abolish this cloud, and this may be done by drying the breath previous to its entering into the beam ; or, still more simply, by warming the glass tube. When this is done, the luminous track of the beam is for a time uninterrupted. The breath impresses upon the floating matter a transverse motion, the dust from the lungs making good the particles displaced. But, after some time, an obscure disk appears upon the beam, the darkness of which increases until, finally, toward the end of the expiration, the beam is as if it were pierced by an intensely black hole, in which no particles whatever can be discerned. The air, in fact, has so lodged its dirt within the passages to the lungs as to render the last portions of the expired breath absolutely free from suspended matter. This experiment may be repeated any number of times with the same result. It renders the distribution of the dirt within the air-passages as manifest as if the dirt was transparent.

"I now empty my lungs as perfectly as possible, and placing a handful of cotton-wool against my mouth and nostrils, inhale through it. There is no difficulty in thus filling the lungs with air. On expiring this air through the glass tube, its freedom from floating matter is at once manifest. From the very beginning of the act of expiration the beam is pierced by a black aperture. The first puff from the lungs abolishes the illuminated dust and puts a patch of darkness in its place ; and the darkness continues throughout the entire course of the expiration. When the tube is placed below the beam and moved to and fro, the same smokelike appearance as that obtained, is observed. In short, the cotton-wool, when used in sufficient quantity, completely intercepts the floating matter on its way to the lungs."

The application of these experiments is obvious. If a physician wishes to hold back from the lungs of his patient, or from his own, the germs by which contagious disease is said to be propagated, he will employ a cotton-wool respirator. In the crowded dwellings of the London poor, where the isolation of the sick is difficult, if not impossible, the noxious air around the patient may, by this simple means, be restored to practical purity. Thus filtered, attendants may breathe the air unharmed. In all probability, the protection of the lungs will be the protection of the entire system. For it is exceedingly probable that the germs which lodge in the air-passages, and

which, at their leisure, can work their way across the mucous membrane, are those which sow in the body epidemic disease. If this be so, then disease can certainly be warded off by filters of cotton-wool. Time will decide whether in lung diseases also the woolen respirator cannot abate irritation, if not arrest decay.

M. Pasteur has shown that the germs diminish as we ascend a mountain. By means of a cotton-wool respirator, so far as the germs are concerned, the air of the highest Alps may be brought into the chamber of the invalid. Fifty different occupations might be named in which irritation of the lungs and injured health arise from the inhalation of dust. A properly constructed air-filter of cotton-wool would entirely abolish the evil. Such a filter, properly constructed, would also be found effectual in warming the air. Provision ought to be made for the frequent removal of the cotton, the cost of which is practically *nil.*

The employment of cotton-wool on scalds and burns, its healing effect on wounds generally, the use of flour in erysipelas; even the binding up of wounds by sticking plaster, and the covering of them by gold-beater's skins, may all have their rational ground, in the fact that they withhold, not the air, but the organic matter of the air.

Nyander held that small-pox, measles, the plague, dysentery and whooping-cough are all occasioned by minute animals. Reámur thought that the small clouds which sometimes seem to hug the earth in summer weather may be insect swarms. Sir H. Holland thinks that the outbreak of carbuncular boils which occurred some years ago in England, may have had its origin without the system, as a virus or some form of organic life. Henle maintained that the material of all contagious diseases is not merely organic, but matter possessing all the characters of parasitic life. Eiselt found pus-corpuscles in a foundling hospital where the children were suffering from conjunctival blennorrhea, and proved conclusively that such corpuscles spread the epidemic without contact with the infected persons. Every Alpine man can testify to the correctness of De Saussure's remark, that a deep blue heaven portends rain, while the air is rendered turbid by a succession of fine days. De La Rive ascribes this turbidity to organic germs which swathe the earth as a light haze. Dr. Smith has experimented on the air of cow-houses and stables, and concluded that such air contains more particles than the air of the street. Mr. Crookes has sought to entrap the germs in infected places. Dr. Greenhow has examined the lungs of stone-workers, colliers and pot-

ters, and found imbedded in them mill-stone, dust, silica, alumina and iron.

The history of this subject, it will be seen, is voluminous; and the pathologist, who will give it careful investigation, ascertaining more fully the phenomena and circumstances which require attention, the nature and character of the morbid action induced, will render an important service to his fellow beings, and add a most valuable contribution to the scientific knowledge possessed by his profession.

THOUGHTS ON MEDICAL HYGIENE.

BY H. PEASE, M. D., SCHENECTADY, N. Y.

Mr. President, Ladies and Gentlemen:

Hygiene, although properly a branch of medical study, has heretofore been sadly neglected by the profession. In my research on this subject, for some stand-point to guide me, I have searched the medical reports published by the Allopathic and Homœopathic Schools of this State in vain. The subject is unlimited in its application. Its field of operation extends over the sea as well as upon the land; in the forecastle of the ship as well as the vilest sink-pool on earth. It is unnecessary to assert or demonstrate further, that medical hygiene should be held in the highest estimation wherever men exist.

It is not my purpose to dwell on military or sanitary hygiene; this belongs more properly to municipal authority and governmental consideration; but as belonging to the medical profession, we have each a duty to perform in the matter, not merely for our professional aggrandizement, but for the benefit of all to whom we are called to minister. It must be evident to the mind of every observing physician, that hygienic law is as requisite in promoting health, as is medicine in removing disease, and the two ought to go hand in hand, for in fact they are so intimately connected that either becomes almost useless without the aid of the other. Separate the positive from the negative, and where would be the power to send a message across the Atlantic cable? The sun has its supports, or it never could stand the repeated motion of the planets in their orbits. We are informed by sacred history that at the flood, the entrance into the ark, was by pairs, male and female, each of its kind; and to-day we observe the same unalterable law, throughout the world. Hygienic law, is as old as the existence of humanity; but from the obtuseness of the mind of man, or some other cause, it has been isolated from connection with medicine, where it properly belongs.

I hope yet to see in our medical colleges, what is so much desired, a chair of hygiene established and maintained for the benefit of those who are yet to come upon the stage of active useful-

ness, so that they may be able to begin where we, their pioneers, will leave off, and go on to perfection. I am fully convinced that medical hygiene has assisted many a doctor out of a bad *case* without his knowledge; take, for instance, a case of fever, and why is it the patient loses all relish for food? Is it or is it not because God, in his goodness and mercy, has put them upon hygienic probation? I dare presume, without fear of contradiction, that nine cases of fever out of ten, if left to hygienic treatment alone, would as certainly recover as well as by medicine alone. Who has not observed patients that had been drugged almost to death, and given up in despair, who refused to take medicine and recovered? Upon what principle did they recover? Some would have the audacity to say they employed a homœopathic physician, and it was astonishing what a radical cure was wrought. It is uniformly, I believe, the custom among all homœopathic physicians to put their patients upon a rigid diet, informing them what they must not eat or drink, for fear it will neutralize the beneficial effects of the medicine.

I am not objecting to either mode of diet or medication, providing the patient recovers; but I do protest that the so called law of *similia similibus curantur* shall not have all the credit, and hygienic law be left without its due, when in fact, the change in regimen was the true cause of the patient's recovery. I fear that men are too apt to be unmindful of the blessings by which they are surrounded, and arrogate to themselves or impute to medicine a credit which does not belong them by right.

There is no limit to the field of hygiene; we behold it everywhere in the world of nature; it actually controls every tissue and fiber of the body; it wards off disease and restores health. Men need but obey the physiological law and observe the hygienic mode of living, for the doctors to have but little professional labor to perform; and physical ailments would, in course of time at least, become few and far between.

Who has not heard from the pulpit expressions like the following: "We cannot distinguish a Christian from a worldly-minded man. Christians are not exempt from sickness and pain, disease or death; hence the necessity in coming out from the world, joining the church, partaking of the sacrament, and thus showing to the world the intent to lead a new life." I grant this to be, so far as it goes, the true starting point; provided that they would but continue to live upon hygienic principles, obeying carefully the physiological laws. If this course was persisted in for five or six generations, much would be

accomplished to eradicate and overcome the evils transmitted to us by our progenitors.

In the practice of medicine mistakes ought not to occur. Holding in our hand, as physicians do, the life of our fellow-beings, we must admit, however, that errors are often made, and generally, no doubt, with good intentions. But there is a fearful responsibility resting somewhere. May it not be found in lack of information or good judgment in omitting to apply hygienic rules in the matter?

Who has not observed the instinct of the lower orders of animals when sick? They refuse food, and paw, eat dirt or medicinal herbs, and recover. Learn a lesson from the cat. She refuses milk and mews around, and finally resorts to catnip, rolls over it, eats of it, apparently with delight, and recovers. Also the dog, obeying a similar hygienic instinct, will be found in the early morn lapping the dew from off the bed of chamomile, eating grass, and otherwise ministering to his own health.

Yet man, who is endowed with superior intelligence, delves into the earth to procure inorganic, noxious and corrosive minerals for medicine, whereas they are as incompatible with organic matter as would be oil and water. I admit there are not a few such who have immortalized their names, to their own shame, at least in the opinion of all medical reformers of the nineteenth century.

What is more beautiful than the vivifying principles by which we are surrounded and sustained? We are abundantly supplied with water, and there is no excuse for men's uncleanliness. The life-inspiring atmosphere is free to all; yet many are too thoughtless or indolent to inhale it sufficiently for health. Last, but certainly not the least, is the sun that shines alike upon the evil and the good, giving warmth, light and vital energy to all. Surely there is no necessity for any to shut themselves up in the shade to wither and die like grass under a stone.

Allow me to say in conclusion that we cannot be too grateful to Him who has surrounded us with every blessing; we are dependent for all things. Let us employ these advantages as men and as members of a profession. If we would be just to ourselves and successful in our calling, it becomes us to prosecute the study of our art with diligence, to be faithful and conscientious, to obey and enforce hygienic law, and be guided by every available means to preserve health, as well as to cure disease. Then with me, in a professional sense, fulfill the apostolic exhortation, to walk worthy of the vocation wherewith we are called.

SCROFULA AND ITS AGENCY IN THE PRODUCTION OF IDIOCY.

REPORT MADE AT THE ANNUAL MEETING OF THE ECLECTIC MEDICAL SOCIETY OF THE STATE OF NEW YORK, JANUARY 26, 1871.

By T. Robens, M. D., Quaker Springs, Saratoga County.

Having been appointed by the president of this society to write on the subject of scrofula and its agency in the production of idiocy, I will strive to present to you my views, though much has been written and many volumes have been filled concerning its origin and effects upon the human race. While some may agree in some respects, many disagree in others. Dunglison defines it as a glandular disease, effecting and irritating the glands until it separates, and is very difficult to heal; and yet he fails to tell its origin. Dr. Stokes affixes the epithet scrofulous or strumous to a number of very opposite diseases, which have no character in common save incurability and chronicity. The term is not unfrequently used to conceal professional ignorance, when the practitioner is puzzled and foiled in the treatment of disease. Dr. Erickson says it is a peculiar constitutional condition, either hereditary or acquired. Where, may I ask, is this disease acquired? All authors arrive about to this point, and then stop. They fail to tell us its precise origin, or even to agree on any one point. Prof. Cleveland and others tell us that it is tuberculous consumption. They get here, and, like learned men of ancient times, and in fact many physicians of the present age, after they have exhausted all of their means on some of their patients; bled, mercurialized, and, in fact, murdered them inch by inch, they say, "Patient, you must die; you have got consumption; there is no help for you." They fail to explain why they have it; can't tell from whence it came or where it will go, only it will end with them in death; unable to say but that the disease will rise up again and afflict the next generation.

I am well aware that there are physicians, that deny that this

disease is transmissible or hereditary. And yet they insist "that a child's liability to a great number of diseases is great, for they may be impressed upon the child by the parent; but that the disease is actually transmissible, is a great error.

I would like to ask such men, what is the effect of venereal disease upon the human race? Take the parent that has contracted this foul disease, what effect will it have upon his offspring? You will see it upon the little innocent child, when it first comes forth into this cold world. You will see it when it buds forth into childhood, and from childhood into man or womanhood. Ah! yes, you will see then. The disease of the parent will be there. True, it may lie dormant through the whole life of the parent, but their offspring may suffer from it materially. The Scripture has well said, that "Visiting the sins of the fathers upon the children unto the third and fourth generation."

Does not scrofula have the same predisposition to follow the human family, as syphilis? It does. It is very much alike in many instances. I believe I can safely say this, for I could bring evidence to corroborate it, if I had time in this paper. But I have not. I verily believe, that if venereal disease had never been known, this disease, called scrofula, would not have been in existence. But we have it entailed upon us, and have been told its effects to a certain extent, and they are these: Tumors, deformities of various characters, diseases of the joints and bones, ulcers, and lastly, consumption. Very true, while some are afflicted with these types of scrofula, others are suffering from it differently. There are two distinct types of scrofula; while one effects the glandular system, the other effects the nervous. We thus have dullness of vision, and total blindness. I do not mean to be understood, that scrofula, affecting the brain or its membranes, will always affect the eyes, or cause blindness; not so, but there are instances, that it will do it. Neither will it produce total occlusion of the mind at all times; but when this disease locates itself upon the brain or its membranes, it will impair the mind materially, as in the case of a certain family which has been under my observation for years.

A Mr. S. was united to Miss C. Her age was about twenty-two and his thirty-two. In due time, the wife became the mother of three children. They all appeared to be, and were called unusually smart and healthy children, yet a close observer could detect a scrofulous diathesis. At about the age of six years, two of them began to

exhibit symptoms of debility; scrofulous tumors of various sizes came upon the neck and different portions of the body; at times it seemed that they were about to suppurate, then they would diminish in size, and the children would improve for a season. Thus these tumors would appear and diminish until about ten or twelve years of age; at which time their intellect became impaired. The boy's mind was so much affected, that he was incapable of doing any work, unless some one was with him to advise him. There were times that he would not do anything. While having these attacks, he would be so savage, that he would seek to destroy the lives of the family. At times he would be voracious, and at other times he would eat nothing at all, unless fed by his mother. These spells would last from two weeks to two months; then he would be quite rational so as to do some work. While having these spells, he would cough and raise a dark, yellowish matter, and one seeing him now, would suppose he was born an idiot. The girl's case is similar to that of the boy's, or was, until quite recently. For the past year, she has been very much deranged; she would spend her time in bed, or in cutting pictures and pasting them on the wall. At times she would appear to be in great distress, and would press her hands against her head and say that her brain was coming apart. Sometimes there are sores formed on her neck and spinal column, which remain some length of time, without much discharge.

They were treated by the best of the Old School physicians, and the disease pronounced scrofula. The opinion was given that they could survive but a short time; but they are still living, having been great sufferers for twenty years. Their father was an active business man, had a cancer, and died in middle life. Their mother is still living, and is troubled very much with scrofula. Her grandmother and sister, each died with a cancer. Thus we have two cases of idiocy caused by scrofula, that have come under my own observation.

We find in some cases, there are no portions of the system that escape this disease. The joints enlarge, become painful, and the surface of the bones tumefy, forming nodes, while the interior yields to the process of absorption, constituting what is called caries of the bones. The ligaments and tendons are also the seat of great pain, often depriving persons of sleep.

In other cases, when affecting the spinal column, the disease will have such an effect at times upon the mind that they will not realize their sufferings; while there are cases where it wholly deprives them

of their intellectual powers, as in the case of a lady, who became an invalid from the effects of this disease. She had, from childhood, been afflicted with scrofula, but not to that extent to produce much alarm, until about thirty-five years of age; then it located in one of her arms. She received treatment from the most skillful Old School physicians for one year. She, at this time, lost the use of her arm, and her mind became affected. She was sent to a medical infirmary, and received treatment for six months or more. At this time, she returned home, nearly deprived of her physical and mental powers. About two years after this, I was called to see her; I examined her case closely, found that disease had done its work, having placed her beyond the power of man to cure or even to make comfortable. She failed gradually; her deglutition became greatly affected; her mental faculties entirely destroyed. After living six years, she passed away.

If I had time, I could present to you many such cases, where scrofula had destroyed both body and mind. I verily believe that two-thirds of the people who are idiots or lunatics to-day have become so from scrofula. It is extraordinary the length of time that some constitutions bear up against this scourge; and, no less so, the rapidity with which others sink under it. It is, therefore, important that no time should be lost is seeking and obtaining proper remedies. When this disease is suffered to proceed, and is not counteracted by proper remedies, the unfortunate victim will, in the course of time, be afflicted with great uneasiness of the nervous system. His countenance will become sallow and haggard, and he will lose his appetite, strength and flesh. His rest will be disturbed; and as soon as the malady locates on the vital organs, death will speedily ensue. But if it should locate on the bones or spine, and thence to the brain or its membranes, as often is the case, the patient may live many years, deprived of the use of his mind and body.

There is still another derangement that scrofula will produce, especially among females: Convulsions, often called epileptic fits. It is our duty to know what is the cause of their derangement, whether it is owing to malformation of the skull, depressed bones, or a spongy growth on the internal surface of the cranium, or an effusion of blood upon the brain, retention of the catamenia, poison received in the system, masturbation, severe fright, or scrofula.

It is not my purpose to give a general description of this disease, for it is too well known. I speak particularly of its effects upon the

mind. The cervical glands or ganglions enlarge, being at first small and sensitive to the touch, but subsequently, hard, irregular on the surface and indolent. In this stage they are movable under the skin, but sometimes, increasing in size, they become immovable and painful; many times interfering with the subjacent organs, so as to affect the voice, respiration and deglutition. These organs may be affected sometime before the mind becomes affected; but when the mind begins to fail, these organs that were first diseased may return to their natural action and remain so for some length of time, and then become as severely affected as they were formerly. In other cases these organs may not be affected, or at least not in the early stages of this malady. In some cases the color of the skin is scarcely changed; but, at times, the projection on the side of the neck is so great as to constitute deformity, and to interfere with the movements of the head and with the separation of the jaws. After remaining in this indolent state for some time, the tumors may gradually disappear. But, in childhood especially, they more frequently proceed to suppuration, and the patient passes away in a short time. The ages of those persons whose minds become affected generally range from ten to forty years. That class of persons where the derangement begins between the ages of ten and twenty years, seldom live to the age of forty or forty-five, and those with whom the disease has not worked so rapidly and the mental faculties do not become impaired until the ages of thirty-five or forty seldom live more than five years. The symptoms that are most prominent in that class where the ages vary from ten to twenty years are these: Forgetfulness, desire to sleep a great deal, peevishness, headache, constipation, feverishness, dizziness, etc. The physician will generally pronounce the affection fever. After having been treated for a time the patient shows conclusively that his faculties have left him, and the physician continues the treatment in hopes that he may recover his mind, but to no use. There may several swellings come on the patient which may discharge for some time, or may not suppurate at all. There will be a great deal of inflammation of the nasal glands, pain in front and back part of the head, arms and neck, a great weakness of the spine, especially near the kidneys; generally such a weakness of the neck and spine that the patient may be for weeks, and perhaps a year, ere they will recover any strength of body. If a female, the catamenia will be very much obstructed; ceasing sometimes entirely during the earlier portion of her illness and remaining

obstructed until she is able to take exercise; and, after a few months, she may recover in a degree, but not to be regular during her lifetime. The bright healthy color of the discharge will change to that of a pale florid, mixed with hard clots of the same color, and she will be also troubled very much with leucorrhœa. Her feet and limbs may swell considerably, and there may be every appearance of terminating in consumption ere she loses her mind; and after her mental faculties are gone, her feet and limbs may return to their usual size and remain until nearly the close of life. The vertebræ that have been so long affected become spongy and aggravated by pressure.

A post-mortem examination brings to light the effects of this direful disease. The back and lower portion of the brain will be found softened and enlarged to some extent. Ulcers and tumors of different sizes will also be found upon the whole brain.

Note.—I notice that Dr. Samuel H. Dickson and other able physiologists classify scrofula as a distinct disease from tuberculosis; a distinction which is evidently correct. I apprehend the former affection to be primarily hereditary, often latent for generations, and finally appearing on the combination of circumstances favorable to its development. It may be a concealed syphilis, hidden away by an ancester. Children have scrofula whose parents appear to be free from it. Prolonged exposure to cold, imperfect nutrition, diseases like measels, scarlatina or small-pox, the occupying of rooms which have an insufficiency of sunlight, all develop scrofula. I have little confidence, however, in Dr. W. Byrd Powell's theory, that it is originated from the sexual alliances of parents of peculiar temperament.—A. W.

UTERINE THERAPEUTICS.

READ AT THE ANNUAL MEETING OF THE ECLECTIC MEDICAL SOCIETY OF THE STATE OF NEW YORK, JANUARY 26, 1871.

By M. M. Fenner, M. D., Fredonia, N. Y.

The last few years have witnessed an increased attraction to that department of knowledge, denominated *gynecology*, the science of womanhood. This is appropriate; as a department of biology, its importance transcends the limits which have generally been assigned to it. Popular experience has demonstrated this, and hence, unfortunately, specialists and remedial institutions devoted principally to this as a specialty, have virtually taken the control of medical practice for diseases of women, entailing upon the patients the necessity of journeying to an inconvenient distance, and an expenditure that many cannot afford. The result is, that the sufferers from "female complaints," the great majority of them, are little better off, practically, than they were fifty years ago. The country is full of them, and their cause requires advocates.

It must be acknowledged, nevertheless, that the general practitioner is not often an expert gynecologist. He may be familiar with the works of Sims, Berryford, Sympson, Thomas and their fellow-laborers, but let him attempt to practice upon their teachings, he will encounter so many difficulties and embarrassments, although they may be trivial to the accomplished practitioner, as to discourage him utterly. If his instruments are imperfect, he does not know the use of better ones. He is embarrassed and diffident, and therefore finds it almost impossible to him to get patients in good position for professional observation, opposite to a good light. Many of this class of patients entertain a strong dislike for a physician whom they regard as over-modest, and will not do anything to facilitate him in his endeavors. Besides, he is generally without good assistants, or even any at all. I have experienced all these difficulties, incredible as it may appear. During

a practice of a dozen years, I have several times undertaken the treatment of female diseases as a specialty, but things did not work as easily and successfully as I had been induced, by the looks, to expect. When I had made all ready, at great pains to introduce a tent, it would not enter. If I made an application of caustic, for the body of the womb, it would, to my great disgust and mortification, barely enter the canal of the cervix, about half an inch. In fine, I have repeatedly abandoned a mode of treatment, which I had found to be laborious, full of embarrassment, and fruitless, for other more successful fields of labor; and from what has come under my observation, other practitioners around me have been no more fortunate in the matter. Not till within a period of two years have I been able to treat diseases of women successfully. But within that time, I have been enabled to attain a degree of success, to me before, entirely out of my reach.

It has become a trite remark, that whenever you find a family with two women in it, one of them has a "female complaint." Indeed, one writer has declared that out of a hundred women in any large or medium-sized city, there may, on examination, be found *one* who has a perfect normal play of all the functions of her body; the remaining ninety-nine being troubled with neuralgia, or otherwise "dreadfully nervous," or having some one or other of the many "female complaints." This may be and probable is, because city life, from its many dissipations and excitements, exposure to bad air and unwholesome conditions, as well as the over-density of population in a small area, is destructive to health and longevity. Perhaps woman, by reason of her sex, is liable thus to disorder and various maladies; but this topic I do not propose to discuss at length.

The one disorder most common of all, is *chronic inflammation of the neck of the womb.* When it is removed, the attending complaints generally disappear, or become relatively insignificant. The inflammation is sometimes confined to the mucous membrane; at other times the parenchyma is involved; and occasionally it extends to the body of the womb, sometimes being confined to the mucous membrane and sometimes affecting also the parenchyma. Ulcers also exist at the os, or within the canal of the cervix. But these different manifestations are only gradations of the same complaint; and the treatment required is, therefore, substantially the same, modified only by the extent and intensity of the morbid affection.

The inflammation is attended by a mucous discharge, which in

time becomes leucorrhœa, the quantity being usually increased after each menstruation. Finally, however, it may end in a purulent discharge of creamy or dark yellow or greenish fluid; bland or fetid and acrid, as the case may be, and varying in quantity from a mere flow to a volume exhausting to the whole vital economy.

There is also a falling of the womb, occasioned by its increased weight from congestion, and by a consequent relaxed condition of the tissues which compose the structure of the other organs connected with the womb. Among the attendant symptoms there are usually pains in the back, in the hypogastrium and especially in the region of the ovaries, directly in front of the hips, but more frequently on the left side; also, soreness on pressure, and bloating of the lower part of the abdomen. The bowels are usually constipated. The patients suffer from depraved appetite, sour stomach, headache, hiccough, and all the thousand and one symptoms of dyspepsia. They are sensitive to cold, especially about the feet, while the head is unusually hot; they are troubled with palpitations of the heart and fainting fits, with pains in the breast, etc.; the face becomes pale, the eyes hollow, and they weep without cause; they become careless, impatient, and feel a sort of languor and dejection, a sensation of stricture almost like choking or strangling, and an involuntary sadness; they are apathetic, melancholy, hypochondriacal. These symptoms are intensified or otherwise modified, by the extent of the disease, the diathesis and idiosyncrasy of the patient.

Many causes have been assigned to this complaint. It is as old as history; and was as common in Egypt and Greece as in the United States of America.* I consider the principal causes to be the seden-

* The *medhra* of Bhavani, the great mother-goddess of the Sivaists of India, is a sexual symbol which appears to have been common to all the religions of the ancient dark-skinned peoples. The superstitions now prevalent in regard to the moon, and the mystic properties of a horse-shoe, originated from this source. Isis, the goddess of maternity, was depicted in Roman statuettes, holding this symbol. A gem or amulet was in use during the earlier centuries of our era, which seems to have been employed by medical men. On the obverse side was Chnuphis, between a hawk-headed divinity and a female suppliant; above were the five vowels, themselves a female symbol, and in the field stood an altar, on which was placed a womb. The reverse side had the following petition in "heathen Greek:" *Τασσον την μητραν της δεινα εις τον ιδιον τοπον, Ο τον κυκλον του μλιου. Fix the womb of this person into its own place, O, the circle of the sun.* The "circle of the sun" was the navel; the navel in man, the macrocosm, being considered in the old philosophies as corresponding to the Sun in the macrocosm or universe. "This inscription," says C. W. Williams, "proves the stone to have been a *general* amulet, a prophylactic against the 'prolapsus uteri,' a frequent complaint in ancient times, owing to the abuse of the hot bath, so relaxing in its effects upon the internal muscles, as well as to the universal recourse to *abortiva* whenever considered necessary. Indeed the word *Μητρικον*, 'uterine,' occurs on talismans, and with the same meaning."—*Gnostics and their Remains*, p. 153.

The Nizam's diamond was used as such an amulet, or symbol.—A. W.

Fig. I.

Outline of the Female Form
with weak muscles and Symptoms of Pelvic Disease.

tary habits so general in our present state of society. Enfeebled tissues are sure to result from want of exercise; so that when the parts are brought into use in walking, standing or lifting, the strain is out of proportion to the power of resistance. Hence, the natural gravitation of the womb and of its accompanying organs overcame the sustaining power of the expelled muscles of the pelvis and abdomen, and prolapsus, with attendant bloating of the lower abdomen, to a certain extent, is the consequence. This is, of course, aggravated by many special causes. Lifting is a direct cause of such aggravation.

But there is another. Every four weeks there occurs a menstrual period, during which the womb is congested with blood, becoming heavy, enlarged, and relaxed. Prolapsus is at this time especially liable to occur, if the woman having enfeebled tissues, does not take sufficient care. Again, this period, from the very cause in question (enfeebled muscular fibre), becomes protracted from its normal period of three or four days to seven or eight days. The muscular tissue is deprived of its contractility to a considerable degree, thus failing to aid the returning circulation, and prolonging the menstrual period.

Finally, the womb does not again contract to its normal dimensions or recover its natural firmness. A condition is thus established which passes readily into a low grade of chronic inflammation, which perpetuates the congestion, enlargement and aggravated weight of the organ. The enfeebled sustaining muscles are additionally overtaxed, and exercise becomes painful and even intolerable.

The aboriginal females, the squaws, who are on their feet the greater part of the time, have heavy but firm muscles about the hips and pelvis, and know nothing of prolapsus or leucorrhœa. Our own *fair* sex would be as happily ignorant if they practiced walking generally from girlhood to womanhood, and through life.

Exposure to cold has been supposed to aggravate the tendency to inflammation during the menstrual period, and perhaps does so occasionally. But masturbation, a practice as common among females as with males, is a most frequent cause of prolapsus, inflammation, leucorrhœa, and "general debility."

The female culprit is apt to be flat-chested; the breasts not filling as they would if the glandular system was more perfect, and the nutritive and secernent systems healthier. They become round-shouldered; their heads drop forward; they are hollow at the stomach pit, and their gait is sidelong and awkward. I have encountered

cases of female disease which I could not treat with advantage till the patients had acknowledged the practice of masturbation, and were induced to refrain from it, or aided to it, by appropriate treatment.

Tight lacing is a prolific cause of female disease, secondary only to sedentary habits. It hinders the taking of wholesome exercise, and prevents the free play of the viscera. It produces atrophy and consequent weakness of the muscles. It obstructs breathing. The muscles are made thin and feeble; unable to do their proper work. They permit the bowels to gravitate out of their normal position and become pendulous. The mechanical pressure created by the lacing forces the contents of the abdomen toward the pelvis, and the pelvic contents are crowded down below their natural position. This is the cause of the "gone-bellied" appearance of many fashionable women. Whatever sphere such women may be fit for, they are entirely unsuitable for the great functions of womanhood: maternity. Compare the plates of the form of a normal woman, of the Venus, with the picture of a fashionable one. The former inspires us with admiration and respect; the latter only awakens disgust and sorrow. It is indeed an instance

"When lovely woman stoops to folly."

TREATMENT.

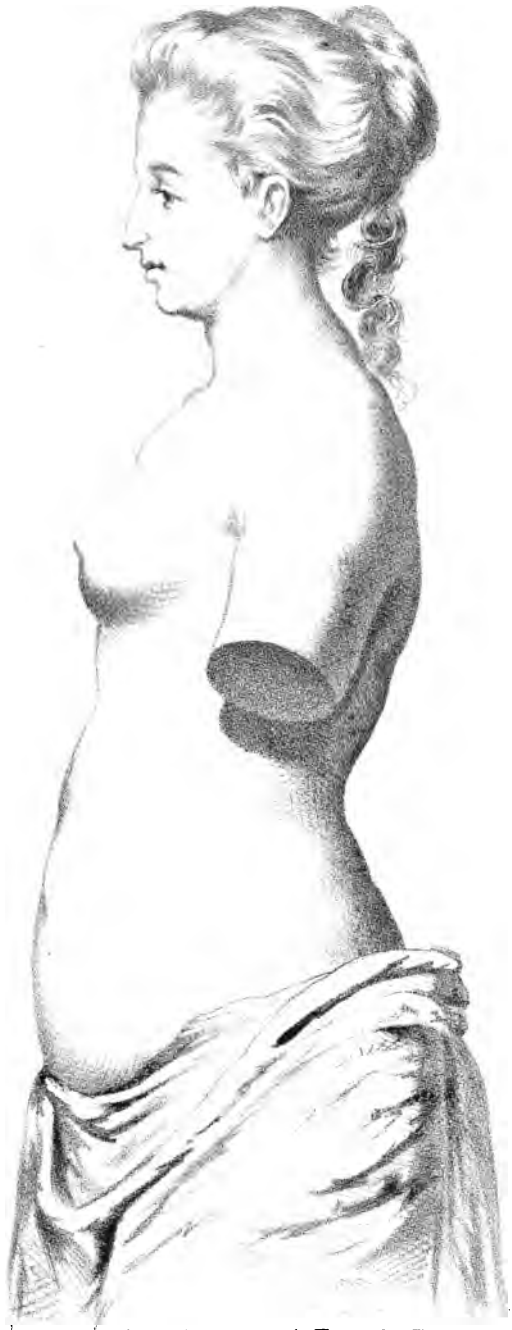
Two principles must control in the treatment of female complaints. But before discussing them, I will speak of mechanical agencies to be employed.

Sponge tents and caustics are recommended by the more recent authorities. To relieve inflammation in the cervix or body of the womb, it is recommended to introduce a sponge tent into the cervical canal to dilate its walls, letting it remain from twelve to twenty-four hours, after which to apply caustic. Nitrate of silver, twenty to forty grains, dissolved in an ounce of soft water, chromic acid, a half drachm to a drachm per ounce of water; or carbolic acid, the clear liquid or a dilution in glycerin; or solutions of sulphate of zinc, copper and of caustic potassa. This application is to be made once a week; during the meanwhile copious injections are to be made of warm water, or mucilage in water, every night and morning. I sometimes resort to this practice myself before or during the early part of the peculiar treatment which I employ.

Difficulties are often encountered with patients:

1. After a patient consents to the specular examination, she, in her

Fig. 2.



Outline of a Healthful Female Form.

"APHRODITE RISING FROM THE SEA."

reluctance, generally takes a position in which the light is not sufficient to permit a full view.

2. When the attempt is made to introduce a tent, it meets with obstruction after entering the canal about half an inch, and will not go any further.

3. Even when the tent has been properly inserted, and retained for a sufficient time, the string may pull away in the act of removing it, breaking the eye, and leaving the body of the tent embedded in the canal.

4. The tent may be well removed and the canal well dilated, yet the latter may be flaccid and close up as the glass speculum is introduced; and as soon as the cotton wool surrounding the uterine probe or steel sound, and charged with the caustic, touches the os tincæ, it immediately contracts and holds the instrument fast, preventing the further passage up the canal.

5. Sponge tents are expensive, costing three dollars per dozen; and when a physician has an extensive practice among this class of patients, and is liable to handle them awkwardly, he will spoil many of them in the attempts to introduce them.

The physician should positively refuse to make an examination till the patient will take a proper position. She should be placed on a table or hard bed, and not in a darkened room. If a round barreled speculum is used, she must lie on her back, bring the sheet over her, cut open so as to permit the free passage of the instrument. Then the left hand is to be passed under the sheet to separate the labia and guide the speculum, and the right employed to press it into the vagina to the os tincæ. It is necessary, however, before doing this, to introduce the index finger of the right hand to make sure that the position of the womb is right. If that organ should be greatly anteverted or retroverted, the field of the speculum would not contain the os.

A good inspection can now be made of the os tincæ, the vaginal face of the cervix, and of the vagina itself, as the speculum is withdrawn. Sometimes, a gum catheter or bougie, properly soaped and bent, can now be introduced into the womb. But generally, this is not easy, and even a tent can seldom be introduced with a glass speculum.

A close scrutiny of the relative positions of the vaginal and cervical canals, will soon to show the actual observer, that the one is not the prolongation of the other, but that when the vagina is filled with a

glass speculum its axis meets the axis of the canal of the cervix at an angle which is more or less obtuse, according to the position of the womb in the pelvis. When the attempt is made to introduce a tent into the cervical canal through the round speculum, it comes into contact with the posterior wall of the cervix, at a distance of one-fourth to one-half an inch above the os, and will go no further.

To introduce a tent, therefore, a Sims speculum may be used; but it is more convenient, after removing the glass speculum, to turn the patient upon her left side, with the hips near the edge of the table or bed. I employ a tent-holder of hard rubber, bent slightly toward the upper end. Into this end is inserted the head of a small darning-needle, of which about one and one-fourth inches of the point projects. On this point the tent is placed, a thin piece of cork having first been strung upon it, extending to the shoulder, for the purpose of enabling the pushing off of the tent after it has been properly introduced. The tent having been covered with hard soap, and moistened on the surface, a string attached to it, held firmly in the right hand to steady the tent on the holder, which is also in the same hand. Introducing the left forefinger, a way is made to the os tincæ, while the right index finger is used to carry in the tent and slide it to the os, along the left index finger, which now assists its entrance. Then press gently upward, and simultaneously carry the hand backward as far as the posterior commissure of the vagina will permit, in order thus to get within the prolongation of the axis of the cervical canal. Provided now, that the tent is not too large, as for the first insertion it should not be larger than a crow-quill, this endeavor will be completely successful. The instrument can now be withdrawn, while the tent is crowded off from it, and retained for a moment in the canal, by means of the forefinger and cork already described.

I have frequently introduced tents in the same manner, with the patient standing, and her back reclining against the wall.

If the tent is larger than I have mentioned, there will be considerable perseverance and pressure required for the introduction. The tent is not likely to slip away when well inserted.

In removing a tent, care should be taken not to tear out its eye, and so bring away the base, leaving the remaining portion in the canal undisturbed.

Make your tents of good sponge, surgeon's sponge, or a little coarser variety if equally firm. Twice I had accidents with tents, both occasioned by rotten sponge. The first time I introduced a

speculum and passed a steel sound into the womb by the side of the sponge; and then, by a prying movement, succeeded in removing it from the place, greatly to my relief and the joy of the patient. She had been very uneasy and suffering much pain. As the canal dilated from the irritation which had been occasioned, the tent also expanded to the same extent; and I am still uncertain whether it would have been expelled before fatal inflammation supervened.

In the other instance I was less fortunate. It was impossible to pass the steel sound into the womb without also pressing the tent along with it. An instrument was required to be constructed especially for the purpose. During the interval the patient suffered intensely. There were high fever, excruciating pains, and convulsions; the os and cervix were tumid, so that no sign of a tent could be perceived. Dr. H. F. Jennings, of Fredonia, assisted me. Anæsthetics were administered, and manipulation employed, which finally reduced the swelling. We employed a gimlet-like instrument, made of untempered wire, blunt at the point, and protected with cotton-wool well soaped. It was "screwed in" around the tent till it reached the cavity of the womb, and then was immediately withdrawn, bringing the tent away with it. The patient recovered.

My present method is to tie a strong string around the center of the tent, outside, and cover it with soap, or soap and wax. The tent is then easily inserted, and if made of good material, will not break asunder.

When caustic is used it must be applied to the farthest extremity of the diseased tissue; otherwise, the morbid material discharged will pass over the healing surfaces and infect them anew. To accomplish this end, a Sims speculum should be employed. The operation is not very difficult. The weight of the bowels falls upon the canal and fills it with air; and the speculum affords a good view, if there is proper position on a high bed or table, with sufficient light. It is usual for an assistant to hold the speculum, while the physician uses the depressor with one hand, and *operates* with the other, applies the caustic, inserts a tent, etc. I have never found it difficult, however, to hold the instrument with the left hand and apply the caustic with the right; using the steel sound, on the point of which it was carried on a dome of cotton wool, as a depressor, at the same time. The dilated os now gapes, so that the caustic can be carried quickly on, and with a twisting or rotary motion, made to reach out and sweep the entire cavity, if desired.

There is a difference in caustics about the facility of so applying them. Some have so strong an affinity for the tissues that it is almost impossible to pass the instrument beyond the first point of contact. Carbolic acid is least objectionable in this respect, and I think is more valuable than the others, which I seldom employ.

Physicians should make their own sponge tents. The sponge should be boiled in water made alkaline with bicarbonate of soda, and worked till it is well cleaned. Then cut it up in conical strips, from the size of the little finger to any larger size required. As a rule the strips should be two inches long. Next, "cook" the sponge in a weak solution of carbolic acid. Saturate it with mucilage of gum-arabic, after which impale each strip on a piece of sharp-pointed wire and wind it tightly with a cord from tip to base; remove the wire and lay the tents aside to dry. When I have occasion to use them, I "finish" them by removing the cord, trimming off with a sharp knife, and sand-papering, first with coarse and then with fine paper. Afterward tie a string around the center, or pierce a hole through for a string. Rub on a ball prepared for the purpose, of equal parts of fine toilet soap and beeswax. I use common hard soap. Moisten the surface and it is rendered "slippery" so as to be inserted with ease.

I have repeatedly made injections into the cavity of the womb. A weak solution of common salt has produced alarming symptoms, where chloride of zinc in the proportion of a drachm to an ounce of water, gave no pain whatever. But no certain or satisfactory results have been obtained. I have never perceived any positive injury inflicted, nor ascertained any considerable benefit from them; but I have been alarmed at the symptoms occasioned, and afraid to persist in their use. I have read reports of death supervening upon uterine injections. Whether the liquid passes through the fallopian tubes into the abdominal cavity is an open question. It is certain that no such "uterine colic" follows the painting of the entire walls of the cavity of the womb with much stronger caustics.

Whether the treatment, which I am about to describe, should be preceded by the foregoing, or for a time accompanied by it, with a view of subduing the inflammation more quickly and overcoming disagreeable symptoms, is to be determined by the practitioner in each case. Sometimes I make use of it for a time; but generally omit it, and think my patients get along equally well. I therefore congratulate myself for being able to spare them the pain and mortification incident to the practice commonly known as gynecology.

As to medicines internally administered, a gentle stomachic, laxative, or alterative I have found of benefit. Also the administration of the following will greatly mitigate the leucorrhœa as well as the inflammation on which it depends:

℞.	Pulvis Lobeliæ,	ʒ x.
	Pulvis Ferri Carbonatis,	ʒ v.
	Pulvis Leptandræ Virg.	
	Pulvis Hydrastis Can.	*aa* ʒ iij.
	Aquæ.	
M.	Whisky,	*aa* ℥ *ss.*

Sig. Table-spoonful three times a day.

The treatment relied upon for permanent cure relates, first, to position and support. The corset and all lacing must be laid aside at once and forever. Let the under clothing and stockings be dependent from suspenders made and worn in the form of a waist. This will let the bowels gradually assume their natural position, and will also permit of thoracic breathing, thus calling into use the long disused muscles of the chest and upper abdomen. As used they will gain their strength and contractility, and assist to hold up the prolapsed bowels.

For the purpose of aiding in the support of a pendulous abdomen, till the muscles shall have gained strength sufficient to sustain it, an external "supporter" may be used. I employ one, of the following description:

It consists of a band of webbing, two inches wide, and long enough to pass around the hip and button on the side. At the point where this passes over the spinal column, it is looped up by the attachment of an elastic stretch, two inches long, thereby giving an elasticity of one inch and a trifle over. Over this loop is passed a soft pad with a fenestra, to permit the loop in the webbing to project behind. At the front is a leather pad, straight above and rounded below to fit into the pelvis, five to six inches long by three to four inches wide or high, through which the webbing also passes. To apply the elastic, a loop and pad are placed over the spine, the webbing brought around the hips, and the pelvic pad slid on the webbing till just opposite the back pad, and nicely fitted against the pelvis or tumid pendulous abdomen. Then the webbing is buttoned on the side, as snugly as desired. When this is used as an external supporter, simply as already described, two narrow strips of webbing are passed between the limbs and crossed, being attached to the ends of the pad in front, and the

side of the webbing, merely to hold the webbing to its position around the hips, and not permit it to shift above them and press into the soft tissue and abdominal contents. This support takes off the downward pressure of the abdominal contents, till the parts above can be strengthened, so as to properly hold them in place. Several valuable points will be seen to attach to this supporter, as it is held securely around the hips, as above stated; that it is adapted for the purpose of support sought to be effected; that it is not wholly elastic, like most supporters of the kind, thereby pressing into and weakening the soft tissues, but is made of inelastic webbing, with about one inch of elasticity, just sufficient to permit the various movements of the body, without producing constriction or undue pressure in any case. Now, when the womb is also prolapsed, as usually happens, it is necessary for this also to be held in position, which is done in the following manner: A silver-plated wire, of the proper strength and curve, is attached to the front pad by means of a screw passing through a long fenestra in the wire, to admit of elevating or depressing the womb one or two inches, as circumstance might warrant. To the other end is attached a wire coil cup, to be covered with cotton, filled with ointment, if desired, into which the os uteri rests. This is easily removed and reintroduced by the patient, and must be done daily, injections used, and new cotton supplied for purposes of cleanliness.

In cases of anteversion, a part of the wire cup is turned so as to pass behind the os, and right the womb into position. In cases of retroversion, the superior front portion of the cup is turned to the front and operates in the same way. When the internal supporter is used, as just described, the narrow strips of webbing that pass between the limbs to hold the supporter down to its place become unnecessary, and are omitted. Thus is everything held securely and nicely to its place. It will be seen that the spring on the wire coil cup attached to the plated wire prevents any jar on an inflamed, hypertrophied and sensitive womb, but permits movements and even jolts without imparting any undue strain upon it, allowing it to ride as easily and securely as it could in a spring basket. A simple wire coil cup, nicely covered with cotton, is frequently used in lieu of any other *internal* supporter. It is soaped on outside of cotton, ointment or butter of cocoa, or any desired application, placed within on the internal sacking or bottom pledget. It is easily introduced. Take it between the thumb and index finger of the right

hand; carry it, the concavity up, through the sphincter vaginæ; then tip it over toward the neck of the womb, and press it up to the organ. The os uteri always finds the concavity of the cup, to which it will be found closely applied on removal. This can easily be removed and changed or cleansed by the patient herself. It is not disagreeable to wear; is a good means, indeed a *perfect* means, of making any application desired to the neck of the womb, and is withal a good supporter. I have used it more largely than any other form of supporter, and like it much; my patients like it. It always gives satisfaction, and will not drop away as one is led to believe on first seeing it.

This much for position and support.

The second point to be attained is the augmentation of the strength and tonicity of the muscular tissue. This is to be effected solely by the use or exercise. It may be difficult for a woman with a prolapsed and inflamed womb and all its attendant sufferings, pendulous bowels, and extreme nervousness to do much walking. But, after the "replacement and retention" have been effected, there is no danger of doing harm by it; and she must walk and do it every day. If weak and feeble, but little can be borne at first, but that little is everything to the patient. It must be increased each day and as her strength will bear. It will produce backache, aching of the limbs, and any amount of aches and pains. But the more it is persevered in, the less these will become, till, finally, long walks become practicable without suffering. The muscles of the abdomen and pelvis, which had forgotten how to obey the will, are again brought into use. The act of walking is precisely the movement to start the circulation *through* them, and not alone *into* them. Waste and repair are now rapid; nutrition is active, strength and health follow, and gradually, one at a time, the artificial supports, perfect in their way, having served their purpose, can be thrown aside. But the walking *never* can be. It is a necessary exercise for the health and vigor of the female reproductive organs; and the standing and walking, the "being on the feet" during one's work about the house, is not the kind of walking meant, and will not at all take the place of the daily morning and evening walks. Now I *know* this doctrine to be correct, and can point to many cases of cure by it. Hence I try to state it in the strongest terms at my command.

On the subject of *exercise*, or rather *rest*, Thomas quotes from Astric as follows: "To charge the patient to abstain from all kinds

of exercise, and to keep constantly laid down on a long seat," and adds, himself, "This advice, given over a century ago, is often neglected to-day, and too much reliance placed upon local means, and upon them alone." (Thomas' Disease of Women), (p. 194): "The patient should be instructed to take much less exercise than usual, to lie upon her bed or lounge for several hours during the day." (Id., p. 226.) "Rest as absolute as the health of the patient will permit." (Id., p. 237.)

Yet he says (pp. 194–5): "Every one who has had experience in the treatment of these disorders must have been struck with surprise at the wonderful improvement exerted upon cases which have long resisted local means, by a sea voyage, a visit to a watering-place, a course of sea-bathing, or a few months passed in the country. Not only is this improvement manifest in the general state of the patient, it shows itself locally also, and in some cases even recoveries may be thus attained. The same fact is equally noticeable in old ulcers of the leg. Local means, the efficiency of which, in such cases, no one doubts, having failed in producing good results, entire recovery is effected by means such as those alluded to, which act upon the constitution." Now, instead of considering it remarkable that cures thus result from country recreation, sea voyages, etc., it seems quite natural and intelligible; the only thing remarkable would seem to be a cure at all following such "*absolute rest*," as is enjoined in the quotations. If admissible at all, it certainly should only be for a brief period, while specially engaged in relieving the inflammation before using the supporters. The cure, if any, must result from development of the abdominal and pelvic muscles. This can only be done by the exercise of *walking*. Riding will not in any sense fill the bill. Of what service would be a treatment that aimed simply at relieving temporarily the irritation, with applications, and leaving the patient exposed to its immediate recurrence? Rest may have been essential without the complete supports that have been recommended. With them no harm can come of the exercise of walking; but, on the other hand, great good will be almost immediately apparent. As to the necessity of caustic or alterative applications, I think them very questionable. The application of the instrument, covered as it is with cotton-wool, brings this substance in contact with the inflamed cervix. Of itself it is a good application. The discharge becomes at once more copious, and changes very soon to a healthy character, and improvement rapidly follows.

As the supporter is daily, or twice a day, removed and cleansed, the cotton renewed, and the vaginal canal syringed, for purposes of cleanliness, the cervix can also be irrigated with soothing injections of warm starch water and tonic injections, the following of which I have found to exert an excellent influence.

℞. Zinci Sulph.
Plumbi Acetati.
Hydrastis Can. Pulv. *aa* gr.

Add five or ten grains to one-half pint boiling water. After cooling, use as cleansing and tonic injection, retaining a portion ten or fifteen minutes.

Thus a treatment is offered both to obviate and cure female diseases, at once simple of application, inexpensive and successful, and its *rationale* must commend it to every thinking mind. It may be epitomized thus:

I. Alterative or local applications, for a brief period, if thought advisable.

II. Secure the natural position to the abdominal and pelvic contents by removing all obstruction in the way of lacing, etc., and *retain them there* by the mechanical contrivances named, or others that will fill the indention.

III. Augmentation of the power of the muscular and other structures of the pelvis and abdomen, thus securing a natural support to take the place, so soon as may be, of the artificial one supplied. This is done by *walking*, thereby producing an increased flow of blood *through*, and consequent increased nutrition and development of these muscles and all of the contained viscera.

MATERIAL SUBSTANCES AND THEIR MOTIVE POWERS.

By Thomas R. Fraser, M. D.

"Our doubts are traitors, and make us lose the good we oft' might win by fearing to attempt."

Much doubt and mystery prevails in the scientific world, concerning natural phenomena. Mystery, signifies something that is hidden or unknown. It therefore seems to be imagined by our learned scientists, that mysteries are inexplicable, not to be explained or even discovered. Hence we have a continuation of doubt and mystery connected with natural phenomena. The mystery, however, appears to be only in the minds and imaginations of the observers, and not in the subject-matter itself, as I expect to be able to show.

We may notice in nature's continuous action, change and phenomena throughout the whole of the material connected with this earth, such changes and phenomena are evidently the result of some superior, natural, invisible influence and force, or power, that must be regulated by *natural law*, and over which we have no control.

These phenomena and changes themselves, are plain to our senses, therefore, within our comprehension, and easily understood. Difficulties, doubts and mystery are referable to the cause or influence that produces these changes, effects, and phenomena. Why difficulty or mystery has been continuously connected with the cause of natural phenomena, appears to be owing to the imagined impossibility of its being removed, and to the method generally employed by our scientists for investigating the source of those effects. That is, our scientists refer all natural force, action and phenomena, to a *mechanical law*, without seeming to notice that they emanate strictly from a *natural law*. Now, these two kinds of law have respectively their own spheres of action; and though they harmonize in their respective spheres, they are nevertheless widely different in their character. Mechanical law implies an arbitrary arrangement of matter, by which the natural law governing it may operate, but we have no further control over the operations of matter or its natural law. That is, if matter be undisturbed, it will, without our interference, by virtue of

a power inherent in its atoms, work out certain results adapted to its condition. These results are determined, in every instance, by the nature, condition, combination and position of the materials. Now, from taking a mechanical view of nature's operations, scientists have been led to believe that there are a *variety* of forces or causes that influence matter in its manifestations of form and action. This is a serious mistake, and has served to keep a very simple operation in inexplicable mystery. A deeper knowledge of the nature, properties, action and law of matter, will show that there is but *one*, and not, as is assumed, many natural or primary forces, influencing matter throughout all its numerous combinations and phenomena. It can be shown that however varied these substances are in their nature and operations, they are composed of but *two classes of atoms*, and consequently that the difference which is seen in phenomena or effects and in the forces in nature, is not owing to *different forces*, but to different conditions and positions into which those two classes of matter are continuously changing, either through their natural law, or by mechanical arrangement to be acted upon by this natural law. I lay it down as a first principle that all material substances are formed and all their manifestations produced and determined by a certain *inherent natural force*. What this force is can best be ascertained by a more correct observation of matter, its operations and its *natural law*. Through an examination of the effects and phenomena of matter and its forces, and tracing them to its source, a more correct knowledge of matter and its *natural law* may be ascertained. For a better elucidation of the subject, I will now proceed to contrast the views which I entertain in relation to the effects, phenomena and forces found in nature, or which are alleged to be found in nature, and which I believe I have traced to *their source*, with the popular readings of scientists, premising that while I entirely agree with them touching facts, respecting which there can indeed be no controversy, I wholly differ from them, as will be seen, in reference to the nature of, and law governing matter. It will be seen that they regard the effects observable throughout nature at the result of a *mechanical law*, while I take the ground that they are the offspring of a natural law. The difference between a mechanical and natural operation I hope also clearly to explain, in the following contrast. However, before proceeding to do so, let me observe that with the following first and second sections, as are generally admitted, I agree by adding the

words that are in brackets; what then follows will be placed in juxtaposition.

Section 1. The universe consists of *matter* and of certain forces termed *motive powers* which operate upon material substances. Beyond these we have [as yet have had] no conception of the existence of anything. We recognize material substances, and their properties and qualities by our senses. We can see, taste, smell, touch and hear them. We [may] use or reject them according as their qualities and properties are useful or otherwise, and by these qualities and properties we distinguish one substance [or atom] from another.

Section 2. Chemists and natural philosophers have examined the various substances of which the world we inhabit is composed, and have found that they are made of, or compounded from less than seventy simple or elementary substances. It is thought by some, that a part of those now considered to be simple will hereafter be found to be composed of two or more elements. [These seventy simples may, or can now be divided into *two* elementary classes of matter.]

Section 3. *As it is generally stated.*—"A particle of matter so minute that it is incapable of being further divided by any means is termed an atom. Singly, an atom is invisible; but when brought together in large numbers they form visible and tangible bodies."

Section 3. *As I would state it.*—Atoms are minute invisible particles of matter, from which all visible substances have been created, and are still being formed, separated and reformed. Atoms are of *two* classes, when they are gaseous and liquid and at rest they are invisible, void; but when the two classes as gases or as liquids come together, and are in a position to reciprocate and intermingle with each other, they produce *chemical action* and become opaque or cloudy, and form visible substances.

Section 4. *As it is generally stated.*—There is a constant tendency among the elements of matter in atoms and in masses, to form, to separate, to change places, to reunite in different proportions and relations. New forms are continually appearing and old forms disappearing. These changes arise not from any capacity inherent in the substance or the atoms, but through the action of the motive powers upon them.

Section 4. *As I would state it.*—There is a constant tendency among the atoms of those two classes or elements of matter, when in

gases or liquids, and when as such they are in a position to act, to form combinations with each other. By their reciprocal action they unite or separate; they are thus continually forming substances or dissolving them by the same process and laws. They thus keep up a continuous or *perpetual motion* and change. Thus new forms are continually appearing and old forms disappearing. These changes arise from an indestructible capacity or power inherent *in all* the atoms, and thus it is in all their compounds or substances; their action is, therefore, through *their own* natural inherent power.

Section 5. *As it is generally stated.*—The motive powers are known to exist not because we can recognize them by any of our senses, but because we can perceive the effects which they produce when they are in action. We cannot detect by any of our senses, the essential power that brings an apple to the earth after we have thrown it upward, but we can perceive that there is some cause which arrest its upward motion, and brings it downward until it is stopped by the ground. We term this force *gravity.*

Section 5. *As I would state it.*—That motive power is known to exist and to be *in* or connected with the atoms, because we can recognize its effects by our senses, as we can see the effects which it produces when matter in atoms or in substances are in a position to bring its power into action. We can detect by our senses that power as the essential power that brings an apple to the earth from the tree, or after we have thrown it uwpard, we can perceive *that* to be the power which arrests its upward motion and brings it downward until it touches the ground. We term this force *magnetic attraction;* or, in this case, it is called *gravity.*

Section 6. *As it is generally stated.*—"Gravity. Its tendency is to bring bodies together, without producing any change in their structure."

Section 6. *As I would state it.*—Gravity. It is the tendency of gravity, as it is of magnetic attraction, to bring bodies *of their like* together, without producing any change in the body or in their structure. The greater body or compound of those elementary classes of atoms, as is the earth, invariably influencing the less.

Section 7. *As it is generally stated.*—"Chemical Affinity. We observe when certain substances are brought into very close contact, as an alkali and an acid, or an acid with a metal, one of the substances, usually requiring to be in a melted liquid, or gaseous condition, that the atoms of each substance separate from those with

which they have been associated, and unite with the atoms of the other substance in definite proportions. In this change, the original substance disappears, and their elements reappear in a new and different compound, with properties unlike either of the former. The power which produces these effects, we term *chemical affinity*. Its sphere of action, is among the atoms of substances, and the compounds which it forms are always distinctly definite in the proportions of the elements of which they are composed illustrations. The atmosphere is a mixture of two invisible gases, oxygen and nitrogen. When these two gases are chemically united, one atom of nitrogen to five of oxygen, the resulting compound is nitric acid or aqua fortis, a colorless liquid like water, of an intensely acrid and corrosive character. This acid decomposes pure silver, uniting with it, forming nitrate of silver or lunar caustic. This new compound is decomposed by common salt, and another, viz., chloride of silver, is one of the results, which appears in the form of a fine white powder, insoluble in water. Put this powder in a solution of cyanide of potassium, and from their chemical union with each other, is formed cyanide of silver. Pass a current of galvanism through a solution of this, and it is decomposed thereby, and pure silver will reappear. During these changes, the silver has been associated with compounds containing oxygen, hydrogen, nitrogen, sodium, potassium and carbon, either of which we could have preserved as completely as the silver, of which not an atom has been lost, by reason of the chemical changes. In the last process, another force superior to chemical affinity, was employed. This was galvanism. It broke up the chemical union between the cyanogen and the silver, and rendered the latter back to us in a pure state. Silver is prepared for electroplating, by a process similar to that which we have here described."

Section 7. *As I would state it.*—Chemical Affinity. We observe when certain substances are brought into very close contact, as an acid and an alkali in solution or a diluted acid with a metal, or mineral and vegetable substances, provided one of the substances be liquid or gaseous, that the atoms of each substance separate from those with which they have been associated and unite with the atoms of the other substance, in definite proportions, by reciprocating according to their conditions, proportions and positions. In these changes the original substances disappear and their elements reappear in a new and different compound, with properties unlike either of the former. It is that same atomic

force already referred to that produces *all* these effects; their differences arise from the different conditions and positions of the material. In this case we term it *chemical action* and *affinity*. The sphere of action of that power is universally among the atoms of substances, and the compounds which that power forms are always distinctly definite in the proportions and conditions of the elements of which they are composed. The action and results of that atomic magnetic force may be particularly noticed in atmospheric phenomena. As, in the atmosphere atoms are left in a position more free to act, atmosphere being simply a compound of these two elementary classes of matter with which it is continuously being supplied from the emanations of the mineral, vegetable and animal material composing this earth and its constituents. It is thus attached to, and still a part of, this earth. The variety of mineral and vegetable matter as classes, constitute the whole of the two elementaries, as the animal is produced and supplied from these two. All atoms of these classes have attracting and repelling powers; each class has properties in common and also dissimilar properties, yet the influence of that power is confined to each class separately. That is, atoms are attracted and repelled by those of their own class *only*. When those two classes as liquids or gases come into contact as in the atmosphere, they reciprocate. By each attracting its like they intermingle and thus their dissimilar properties are brought into contact and exhibit phenomena such as fog, cloud, rain, wind, aurora borealis, etc.; they thus becoming equalized are merged into ordinary transparent atmosphere and rest "calm." Their variety of combinations, conditions and positions causing the variety of atmospheric phenomena, and hence the *supposed* variety of forces and causes. Those reciprocal actions of the classes are what is commonly called *chemical action*, and the atoms when in solution, being in a position to *unite*, their tendency to union is called *chemical affinity*, which is produced by that atomic force referred to. The chemical action and decomposition in the dissolving and reforming of silver, etc., by what is called *galvanism* as another force, is an illustration of that same atomic force, already referred to. But in this case it *appears* to be a different power owing to the material exhibiting the force being differently arranged, and in a different condition. That is, in this case, where the silver is placed in contact with the nitric acid, which is composed of the two elementary classes of atoms or gases, their *spontaneous* atomic force is exhibited merely by the solution dissolving the silver as described. That

force is exactly the same as that noticed in the galvanic battery itself, where the metals are being dissolved in a diluted acid; but here, in the latter, the arrangement of the metals connected by the wires, places them in a *position* to concentrate and exhibit the force of their poles, which, when brought into connection with the particles of silver in solution, increases their action in proportion to the amount of atomic force generated in the battery by the action of the metal. It is this particular *mechanical* arrangement and application of the material that induces the *natural* atomic force that is called *galvanism*, owing to its being the same arrangement of similar material used by Madam Galvani, when she *accidentally saw* the touching of the frogs leg with the metal produce an artificial life-motion.

Section 8. *As it is generally stated.*—Hydrogen and oxygen, two invisible gases, *mechanically* mixed in any proportions, retain their separate identities. *Chemically* united they form water.

Section 8. *As I would state it.*—Hydrogen and oxygen, two invisible gases, similar in all their properties and actions to the two elementary classes of atoms, viz., oxygen to vegetable and hydrogen to mineral. Those gases *may be mechanically* mixed in any proportions, as may any or all other substances; and, as it is stated, they will all as atoms retain their separate identity, or may be separated. Yet those gases, as also other substances, when mechanically mixed in any proportions, and *in a solution*, will, according to their position and conditions, be acted upon by that *atomic magnetic force*, over which we have no further control than in the mechanical arrangement of the material. Hydrogen and oxygen, when in their proper proportions, will chemically form water. In other proportions these same gases will *chemically* form *fire*, and to neutralize or extinguish the two, fire and water, they may be *mechanically* brought into contact, in which event, the necessary compounds of both will be *chemically* altered, and both will disappear into their elementary gases.

Section 9. *As it is generally stated.*—Magnetism. A third motive power is known to exist by its influence on some of the compounds of iron. Nickel, another metal, manifests its presence, but not so powerfully as iron. These two metals are the principal mediums for its operations, though it is supposed that all bodies are subject to its influence, at least in a minor degree. The influence of the magnet is so familiarly known as hardly to need any explanation. Magnetism attracts, and also gives polarity. Balance a magnetized rod of

steel on its centre, so that it can turn freely, and one end will invariably point to the north. It is this property of magnetism that gives value to the mariner's compass.

Section 9. *As I would state it.*—Magnetism. That natural power or force, commonly known as magnetism, as it is noticed in steel, iron, etc., under *certain conditions* and positions, is the primary and universal power or force, throughout this earth, sea and atmosphere. The power by which all substances are formed and dissolved. It is the primary force, producing all phenomena. As this magnetic force is invisible, it can be known only by its effects. Magnetism has been noticed, more particularly in connection with steel, iron and other metals, only when they are in a position to exhibit its influence, as was the case when it was first discovered. Those substances exhibiting that power when divided into parts and particles, are found to retain their magnetic influence and properties, as magnets, as in the case of the dissolving and reforming of silver, or in electro-plating. We may thus notice the magnet so well known to be composed from infinite and invisible atoms or particles, that exhibit a similar magnetic power as a magnet, when they are in a position to influence that power to act. Balance a magnetic rod on its center that it may freely turn in *that position*, its power is exhibited as a compass-needle, and we find it pointing north and south while under the influences of the earth the greater compound and magnet. It is this influence and application of the magnetic force that gives value to the mariner's compass. But, apply a bar of soft iron to the needle, and *according to the position* of the bar to the needle, so will the attracting or repelling power be exhibited on the needle, strictly according to that *law of attraction* or gravity, by a force that varies according to the condition and position of the substances or particles and their surroundings. In southern latitudes the action and effect of that influence on the needle by the bar is reversed. It is this influence and action on the needle, that is one of the causes of difficulty and danger to the mariner, by his compass on board of iron ships.

Section 10. *As it is generally stated.*—"We find the three motive powers, just examined, to act differently from each other upon the same substance. Gravity has no other influence upon silver, than to bring it to the earth and fix it there. We have shown how chemical affinity can act upon it. Magnetism has no known effect upon it. Gravity, acts upon iron, precisely as it does upon silver. Chemical affinity will act as variously in compounding iron with other elements,

as we have seen it do with silver. Magnetism attracts iron to iron and nickel in masses, and also gives polarity. These various effects upon the same substance, prove the power causing them to be essentially different. They agree, however, in respect to being attractive, and hence we term them the *attractive forces*."

Section 10. *As I would state it.*—We find the same substance or material just examined under different conditions and in different positions, thus to be acted upon differently by *apparently* different powers or forces, yet we find them to be all ONE and the same force. That is, gravity is merely the attraction of *all* bodies to the earth, according to that atomic law, the greater influencing the less. That attracting power being in all atoms, and there indestructible, it must of necessity be in their compounds, and as like attracts its like, the earth, being composed wholly of the two elementary classes, must attract all bodies and atoms to its surface according *to their density*. Thus, as all bodies become either more or less dense or gaseous by the attraction or repulsion of their atoms, they take their place on the earth, and in its atmosphere toward the earth, according to their density. The more dense the atoms as a substance, the more light must they be as gas. Gravity or attraction only tends to draw bodies together, without any change in their composition. Attraction and chemical affinity are the same powers acting upon matter under different and also similar conditions; as, where one or more of the compounds or substances, composed of the differing classes, are in a liquid or an aqueous solution, their atoms are then in a position to reciprocate by their attraction, and reform or unite by their affinity through the agency of water. By the reciprocal attracting force of each class, they intermingle and are brought together, and in the solution they are so minute that they are in a position to unite, as the result of the chemical action and affinity. It is by such process that *all* substances are formed. But as in the experiment with the silver forming from its own solution, or a solution adapted to its formation, so all substances in forming must have the elements of their supply in the solution, and no solution can produce or create any other substance than that of its compound, or original conditions and position. We cannot expect to produce "grapes from thorns nor figs from thistles," and "in mud eels is, in clay none is, in fir tar is and in oak none is;" so with all productions, the adapted material is indispensable. Magnetism may be particularly noticed in the atoms of iron when they are in the form of steel; where the atoms are in a position

to exhibit their united force, owing to the iron being purified from its different or other atoms, its particles become more compact. As magnetism is noticed in steel and iron, so it may be noticed in all things, yet not so obviously in the vegetable and the animal as in the mineral, and then, as in the iron, only when they are in a position to exhibit that power. As where metals are, in connection with a battery, of a chemical, reciprocal action, decomposing metals, as are those batteries and metals connected for the telegraph, where their position and conditions are mechanically arranged to exhibit their *natural* magnetic force and action from the battery to any extent. Magnetic attraction is seen in the formation of vegetables from the decomposing or chemical action of a compound of those two classes, mineral and vegetable matter in the form of earth and manure, that action brings forth a vegetable adapted to its soil and conditions. By the law of "gravity," the vegetable in forming takes a strictly vertical position from the earth. The vegetable atoms having less of that force, their formations are less dense than the mineral, which takes a horizontal position. The vegetable spreads its branches and leaves from each other on account of their being all of the same polarity as that end or pole of the tree; there is but little force or growth shown in the middle, as in the middle position of an iron magnet, where there is no force exhibited. The roots occupy a similar position in the earth to the branches in the atmosphere; the roots are generally in proportion to the branches, and are *attracted* toward their supply *from* the earth. That magnetic influence is seen when coming in contact with the sensitive and other such plants, vegetables are stationary.

That atomic force is in a similar manner connected with the animal; the difference between them and the vegetable is that the animal is migratory, *attracted to* their supply, which they mechanically deposit in their interior, where a similar decomposing action takes place as in the case of the mineral and the vegetable supplies and solutions.

This deposit generates a force as does the material in the "galvanic" or mineral and vegetable batteries, that distributes the solution. The particles or atoms of which are attracted to their like material throughout the body, as was the particles of silver in its formation. The effects of that magnetic force may be noticed in animal nature where it is commonly called animal magnetism, biology, mesmerism, etc. Those effects can be better illustrated practically and medicinally to be the result of that atomic magnetic force.

That force may be artificially increased in the animal and the vegetable, each through their own "battery," in the same manner as it is increased in the metal by the application of its battery, which exhibits its galvanic action on the animal through its moisture; water being the medium of its action in all solids and liquids. Nature seems to call our attention to the fact that magnetism pervades all her forms and is universal, by making certain substances in each division, more susceptible of this force than others as the sensitive plant, etc., in the vegetable kingdom. The torpedo among animals and the loadstone among minerals, so do all other forms, in a less degree, exhibit magnetic properties. This same magnetic force is noticed more particularly in the earth, from its influence on the compass-needle and on iron ships; its influence there can be illustrated by the bar of iron and by the "gravity" of bodies attracted by the earth's atomic magnetic force. That force in the earth is supported by the agency of water with which the earth is saturated both in the interior and on the surface. These various effects or productions and phenomena from the same material in different conditions, proportions and positions, prove that power producing them to be that magnetic attracting and repelling force inherent *in all atoms*, and as it is generally admitted that those forces as noticed are all attractive, they are called *the attractive forces*, yet their actions are all dependent upon the magnetic force of atoms.

Section 11. *As it is generally stated.*—"Caloric or heat expands air, vaporizes water, expands and melts metals. Cease to apply the heat, and that which you may have already used soon passes off, and the substances cool and contract to their former conditions. The power which produces those effects we term *caloric*. Its tendency is to expand bodies by removing the particles of matter from each other."

Section 11. *As I would state it.*—Caloric or heat, as another force, expands air, vaporizes water, expands and melts metals. Caloric or heat does produce all those effects. But may we not ask, what is caloric or heat? Vegetable matter is found to be similar to caloric. That is, vegetable matter is naturally warm, and mineral matter is naturally cold; when those classes of matter are in contact, under certain conditions, they produce heat and combustion. There can be no exhibition of heat or combustion without those two classes, and they are both incombustible when alone or separate. These classes may be united, either naturally or mechanically, to induce or produce

heat. This heat is the cause and the consequence of the action of the repelling force and action of the atoms of other substances, by which they pass into their original elements, occupy more space and unite with their surroundings. When that action ceases in the production of heat, for want of the necessary material, its effect upon other material must also cease. The substances, then, reciprocating with their surroundings, their temperature must be changed. The power that produces heat or caloric is that same atomic magnetic force; in this case it expands bodies by the particles of matter repelling each other.

Section 12. *As it is generally stated.*—"Electricity. Some of the characteristics and effects of this motive power are familiar to all. It seems to be almost universally influencing matter, and when its force is concentrated, it is nearly irresistible. It decomposes almost every compound."

Section 12. *As I would state it.*—Electricity. Is merely an exhibition of heat and combustion, and is produced from the same elementary causes. Electricity and its exhibition is therefore confined to the atmosphere. It, like combustion, cannot exist without atmosphere or a combination of mineral and vegetable matter. Therefore, electricity is *not* universal. When the material exhibiting electricity, such as that in a thunder cloud, where the atoms by their attraction, are immediately concentrated into a ball of liquid fire, which, in its passage to the earth, comes into contact with any dry vegetable or animal substance, the contact is irresistible and destructive; but if it comes in contact with a sufficiently large metallic or wet surface, it is immediately dissipated, without leaving or exhibiting any destructive effects. It is the magnetic action of atoms that forms and dissolves all bodies; and those, under certain conditions, may exhibit electricity. The material does the work by its inherent force, and electricity is but incidental, as resulting from the action.

Section 13. *As it is generally stated.*—"Light. Another power is known by its effects upon the eye, by its photographic effects on certain chemical compounds, by its capability of being decomposed into the colors of the rainbow, by its motions always in straight lines, by its property of being turned from its course, or entirely obstructed, etc."

Section 13. *As I would state it.*—Light. Although as another force, is but another result or effect of that reciprocal action of atoms from *atomic force.* We find light to proceed from sudden exhibitions of electricity from the clouds, from an electric jar, and from

the poles of a battery; from a sudden explosion of gunpowder and from all combustion. Light continues along with a continuation of combustion. Combustion and electricity has already been shown to be the results of the reciprocal action of atoms. Light is seen to proceed from animals or insects during particular states of the atmosphere, when their emanations are acted upon by the atoms of the atmosphere. Also from the emanations from the earth in polar latitudes, during particular states of the atmosphere, when by those emanations the *aurora borealis* is exhibited. Light is therefore the result of that reciprocal action of atoms, and is, as electricity, confined to the atmosphere and to combustion.

As light is composed of the two classes of atoms, hence it can be decomposed, and these two classes distinguished and separated, or shown by their colors, as in the rainbow in the atmosphere. That is, the vegetable class may be known by its warm, red and yellow colors and their compounds; the mineral class by their cold, blue and white colors and their compounds. Light, as magnetic force, is always in straight lines, and is reflected from a smooth surface of opaque bodies at a like angle at which it strikes, and through transparent bodies, liquids and gases. Those may be formed and placed in a position to concentrate the light from the sun and induce heat, electricity and combustion. Light and heat from the sun is caused by the reciprocal action of the atoms of the atmosphere of the sun with those of the atmosphere of the earth, by which, as is their position and focus, so is the light and heat evolved. That light and heat from the sun is known to be different from that of combustion, both by its direct and by its reflected light and heat being different in its nature, its effects more powerful on the eye, by its photographic effects on certain chemical compounds, by its capability of being separated into the colors of the rainbow, or of the two classes of atoms, and of its being more diffused and oppressive than any other light. Therefore light by those atmospheres, or of the sun, cannot be from combustion; yet it will cause or produce combustion in a suitable material. Similar effects to those cannot be produced by light from the combustion of substances or of atoms. By combustion, substances composed of those two classes are decomposed, or merely converted into their original elements, gases. *In that* combustion the colors of the two classes of atoms are distinguished, as may be seen in pyrotechnic compounds and their exhibitions of combustion.

Section 14. *As it is generally stated.*—These last three forces approach very closely the character of material substances. Caloric expands bodies, and occupies the space between their particles. Electricity has power to split trees. It would seem to require a material body to do this. Light may be decomposed, concentrated (by a lens), or turned from its course, in a manner similar to other substances. Caloric, electricity and light are termed *diffusive forces*, from their constant tendency to separate the elements and atoms of matter.

Section 14. *As I would state it.*—The last three forces are called *diffusive forces;* but they also are only secondary or induced, as they are all the results of the reciprocal action of the atoms of the two classes of matter, and in the production of these forces the elements of the substances or material are expanded and separated by the repelling force of the atoms, owing to their positions. Those "diffusive forces," viz., caloric, electricity and light are all closely connected with each other, as they are merely different exemplifications of the one or of the same effect and conditions of matter arising from the atomic force of atoms.

Section 15. *As it is generally stated.*—We term these six forces, *the motive powers of the inorganic world.* If not essentially material, they have evidently always existed in connection with matter, and to their action upon matter we refer all the inorganic changes and phenomena of the known universe. They are not life, nor the cause of life, though, like many of the distinctly material elements and compounds, they are useful or necessary for the purpose of living things.

Section 15. *As I would state it.*—It will be seen by the foregoing that where there are *apparently* six forces or *motive powers* of the "inorganic" world, that there is actually but *one natural force only* that influences the inorganic and organic world; hence, it must be *the primary force of nature.* That force is magnetism, or what may be called *atomic magnetic force.* And that, consequently, gravity, chemical affinity, caloric heat, magnetism, galvanism, electricity and light, are only different forms, or, more properly, displays of atomic magnetic action, and have not, as is surmised, and as they *appear* to have, the character of material substances, but are some of the varied exhibitions of material by that inherent force upon a suitable material. Atomic force must be clearly contradistinguished from the material through and by which it operates, and also from other *so called* primary forces of which it is the parent. Atomic force is the primary force in nature, as it is magnetic. It produces a change

in the position of the atoms, by their law, which is *the natural law.* These changes cause the exhibition of the other forces. It must be very obvious that neither gravity, chemical affinity, caloric, electricity, galvanism or light, can exist without that atomic force, but it is just as obvious and susceptible of the clearest demonstration that such force is magnetic in its nature and character, therefore *magnetism,* so termed, is the moving *cause* of *all* other so named forces. It is influenced by laws *entirely its own,* hence the difficulty and mystery resulting from the erroneous application of *mathematical or mechanical law* to an invisible influence or force that is *in,* and not, material, and that controlled *by natural law.* While we would not confound magnetism manifest in all substances with life, it is very clear that life exhibits itself in all its movements, from first to last, in atomic magnetic action; and, indeed, so does death, for that matter, as also dissolution; for what is death but a state of stagnation preceding a decomposition, or the inverse action of the atoms by which any atomical structure is organized and built up. Under all circumstances do we find living organizations accompanied by this atomic force. Thus each organized body is produced and maintained by the action of that living principle within it which is there called *vital force.* It builds up, sustains and repairs injuries, and continues to manifest its power throughout all changes. That vital atomic force is magnetic, so also is the dissolution or death. Without, therefore, determining the spiritual nature or origin of life, we still can clearly see that, from first to last, in all bodies, mineral, vegetable and animal, it is begun and ended with *magnetic action.* There can be no kind or degree of life, no structure, no light, no movement of any kind without it. In a material point of view, it is the alpha and the omega of creation, hence the origin of all other forces.

HALIFAX, N. S., *March* 27, 1871.

A PHYSIOLOGICAL STUDY.

Iamblichus, the Neo-Platonic philosopher, writing in relation to imparting knowledge to the impure and unworthy, made the following declaration: "He who pours water into the muddy well does but disturb the mud." (*De Vita Pythagoræ.*)

Jesus himself uttered repeatedly the same sentiments:

> "Give not that which is holy to the dogs;
> Neither cast ye your pearls before swine;
> Lest these [the swine] trample the pearls under their feet,
> And lest the dogs turn and rend you." (*Matthew* vii.)

Owing to the morbid, abnormal and wicked impression upon modern society, it is difficult to treat upon certain topics, however pure the thoughts or modest the language employed, without rousing the prurient in mind to malignant aspersion or profane ribaldry. We write not for such, and would have little speech with them; for we would not befoul or degrade our own thoughts, or the subject which we propose to consider.

It is usual, in all fashionable books upon physiology, the science which treats of the physical functions in their normal condition, to expound what may be known concerning the brain, the muscles, the thorax and abdominal viscera, the nerves and glandular systems, the arterial and venous ramifications, but to leave out the information which is most coveted and needed. That department, it is said, is only fit for professional works, and is not suitable for popular reading. Accordingly children are left untaught; adolescents perceive themselves subject to marvelous phenomena, concerning which only the unworthy venture to instruct them; and often men and women assume the relation of husband and wife as lawless and ignorant as the veriest savage, with a prospect in store of a shortened and embittered life. This is the great cause of degeneracy among civilized peoples, and of the premature decay of women. But whoever ventures to tell them better does so at the risk of being scouted as immodest, and perhaps considered as one who would profane the very mysteries of the temple when the Shekinah is manifested.

We have little reverence for modesty of this character. The prin-

cipal deference which we pay to it is from a feeling of tenderness toward honest souls, who have not yet learned to appreciate the freedom which is conferred by the knowledge of true manhood and womanhood. We would impede no one, but we scorn that prurient modesty which is so eager to make one an offender for a word, while misery reigns on every hand from ignorance of the laws of our physical being.

Health is a condition of body maintained only by conforming to physiological law; it is a state of equilibrium between excess and privation. In no particular is this equilibrium more essential than in the exercise of those functions which pertain to the sexual organization. We purpose, therefore, to consider this feature of the subject; not being ashamed of anything that God was not ashamed of creating, yet, at the same time, treating of the matter in no irreverent temper. Sex is sacred as life; and its behests require as vigilant and abundant attention as those of the appetite for food or the impulse of worship. We would deprecate the trampling down of social order on the one hand and the establishment of unnatural restriction on the other.

In tracing the functions of each organ we quickly perceive that the Creator acted according to a purpose, leaving nothing to chance. The impulse upon each organ to act is a law of nature, and cannot be obstructed or excited into abnormal activity without doing violence to the organ thus restrained or stimulated. In treating of this subject, therefore, a moralist should be intelligent, or he will place himself in collision with physiological law. It is useless to enact and criminal to enforce regulations which are thus at variance. No wise man will lecture the hungry upon the duty of fasting. All the organs require development, nourishment and exercise alike; and privation is a violence which nature is sure to resent and punish.

We will not dilate on the evils of luxury and excess; they are witnessed on every hand in the loss of stamina, the enfeebling of body and mind, the inducing of numerous and loathsome diseases. Probably many of the disorders attributed to climate, to diet, to consanguineous parentage, are but the consequences of such excess. But this is a subject that many writers are fond of considering, and it may, therefore, very properly be omitted from this disquisition. We will direct our attention to the other extreme, as being equally abnormal, suicidal and immoral.

It is bad logic which cites sexual abuses for argument that it is wirtue to omit all exercise of the badly-treated functions. Such

reasoning, we are aware, has been common in all countries, among all peoples, in all ages and in all religions. Persia, India, Judea and pre-historical America, Magians, Brahmins, Buddhists, Essenes, Pythagoreans, Gnostics and Manicheans have concurred in inculcating sexual abstinence as the chief good. It would seem as though society had no sooner been formed than men began to withdraw themselves from it, and seek the solitude, the wilderness and the desert. Some were led to take this step on account of a contemplative disposition; others because they were unwilling to bind themselves to the extent which is generally required when men dwell together, or too indolent to exercise the relations growing out of social life, or too sensitive to sustain the sight of evils which appear to have been always incident to civil communities. Says Festus:

"I hate to breathe the breaths, or think the thoughts of other men."

So, in remote antiquity, we find sages and philosophers following the solitary mode of life. Ascetic practices appear to have been among the forms assumed by the religious propensity; pertaining, as they do, to the domain of the passions and emotions, rather than to the reason. First, among the Cushite peoples, who once ruled in southern Asia, and along the Mediterranean, at and before the dawn of what we now know as history, we find that a book existed called "The Nabatean Agriculture," written by Kutami; which treated also of early Chaldean history. In it appear the lessons of monasticism. Azada, the messenger of the chief deity, "founded the religion of renunciation." Dhagut inveighs against the customs of his time, and enumerates the old Babylonian saints of ante-Abrahamic times, who "had distinguished themselves by piety, by abstemiousness, and by their manner of life, which resembled that of angels,"—"prayers during the night and fasts during the day."

The Brahminism of India, everybody is aware, abounded with the most austere practices. The old Gymnosophists displayed a deadness to physical delight which would have cast La Trappe into the darkest recess of shade. Buddhism, now professed by one-third of the inhabitants of the globe, has its penance, its convents and other austerities, so closely like the catholic as to make the latter appear to be transcribed. The kings reigning over the Bactrians, at Balk, anterior to Zoroaster, were often ascetics, as the Desatir and Dabistan declare. Monasticism existed in China before Confucius. The ancient Mys-

teries enjoined ascetic practices for considerable periods. Pythagoras, who established an institute like that of the Jesuits of aftertime, imposed on the fraternity obligations of poverty, continence and obedience. Elijah, the Israelitish prophet, appears to have been a monk; and, also, John the Baptist. The Essenes and Therapeutists of Judea and Egypt were also ascetics. "No one of them ever marries a wife," says Philo; "because woman is a selfish creature, and addicted to jealousy in an immoderate degree, and terribly calculated to keep a man disturbed and misled by her continual tricks; and she is always studying deceitful speeches and all other kinds of hypocrisy, like an actress on the stage." Egypt, before and after the advent of Christianity, abounded with monks. Eusebius and De Quincy regarded the Essenes as identical with the primitive Christians; a declaration that would, if true, prove much more than they could have imagined.

Even modern Protestantism is not wholly clear of the monastic leaven. Societies of unmarried persons exist in one or two of the prominent ecclesiastical denominations: and it is not uncommon to hear the sexual relation spoken of as being in itself somewhat impure, as though marriage and harlotry were not widely different. A woman who admired the late Rev. Dr. William Ellery Channing, expressed chagrin when he married, "because she had regarded him as too pure a man to marry." Even modern social innovators, who would give woman the ballot and other civil functions, are somewhat tenacious in the opinion that spouses shall occupy separate beds; a proposition virtually of an entire divorce.

We trace the modern ascetic notions to a creed that once overspread the known world. It originated, evidently, with the Zoroastrian doctrine of a personal deity-devil. The Manicheans and Albigenses, taught that the world and all creatures were formed by the great Potentate of Evil, and that salvation was attainable by asceticism, rejecting the attractions and delights of material existence, especially those involving the exercise of the sexual functions. Lamaland always has abounded with monks and nuns; and the earlier Christian church, borrowing its notions of evil and of the origin of evil, placed marriage in the catalogue of negative goods, and even went so far as to treat of the washing of the body in terms as odious as familiarity with persons of the other sex. Basil, of Cesarea, chided women for undressing at the toilette, lest angels, as of old, should be seduced by their charms; and Cyprian, of Carthage, declared that bathing made

filthy the souls of the nuns. Exemplary saints appear to have been always very dirty the world over.

Many writers and teachers have inculcated that absolute continence between the sexes was always wholesome, and perhaps a moral duty. In this, the blind seek to lead the blind in a rebellion against human nature itself. We acknowledge that we have little patience with ascetic notions. They appear to us very stupid at the best, and wholly unworthy of sensible persons. We despise the blasphemous sneer of the late President of Kenyon College, just turned Roman Catholic, who quoted Erasmus to sustain his assertion that all which the Reformation achieved was permission for monks and nuns to marry. We include Shakers, Rappists and minor ascetics in the same category. We utterly discard that pietism or fanaticism which inculcates any violence or severity to the body under the pretext of benefit to the soul.

We also deprecate that mode of training, now too popular, by which adolescent boys and girls are precociously hurried into the development of sexual feeling. The pernicious associations which they form, the novels which they read, the clothing which they wear, the social customs which exist, all tend to this; making youths as *blasé* as adults, producing disease and debility, and winding up with premature decay of the powers and functions of manhood and womanhood.

We go no further. It is useless to say, in defense of total continence, that thousands have led a life of celibacy without injury to themselves. It is not true. There is no impunity for thus trifling with our instincts. Nature asserts herself, whether in the convent, or in the monastery, or elsewhere; she treads down every arbitrary restriction which men may seek and impose, or punishes the violence upon the violator. Hysteria, epilepsy, insanity, hypochondria, nymphomania, amenorrhœa, chlorosis, dysmenorrhœa, leucorrhœa, headaches, backaches, spasms, convulsions, premature decay, are familiar complaints among celibates. Debility, impatience, fretfulness, ill temper, which generally shut out sympathy of others, are common with the unmarried. Chorea is often occasioned by this unnatural continence.

Doctor Maudsley, in his third lecture at the College of Physicians, makes the following assertion:

"Sexual hallucinations, betraying an ovarian or uterine excitement, might almost be described as the characteristic feature of the insanity

of old maids, the false visions of unreal indulgence being engendered, probably, in the same way as visions of banquets occur in the dreams of starving persons, or as visions of cooling streams to one who is perishing of thirst. It seems to be the fact that, although women bear sexual excesses better than men, they suffer more than men do from the entire deprivation of sexual intercourse."

The celebrated Ninon de L'Enclos, in one of her letters, also made a similar statement, declaring that women have a physical necessity for love.

The philosopher Plato, in the Timæus, lxxii, ascribes to Socrates the following statement: The masculine impulse, becoming impatient of restraint and imperious, is eager to exercise supremacy. The same is the case with the wombs and organs connected with them in women, which form, so to speak, a distinct being, instinctively desirous of fecundation. This impulse, when it remains without fruit beyond the proper time, becomes restive and indignant, and, moving in every direction throughout the body, it obstructs the passage of the breath and throws women into extreme disturbance, causing all varieties of diseases.

Hippocrates and Galen concur in the same declaration; and Valescus, Forestus, Fernal Riviere, Hoffman and others, attribute hysteria to this cause. Burdach, in his work entitled *Traité de Physiologie*, asserts that entire abstinence from sexual pleasure does more injury to the entire female organism than to that of men; that unmarried women are frequently attacked by disturbances of the menses, chlorosis and leucorrhœa; and they also have a great propensity to melancholy, and are subject to attacks of various grave maladies.

It is unquestionably true that men are equal sufferers from the like cause. The French writer, Michelet, asserts that with the man the center of sensibility is the stomach, and with woman the womb, and perhaps is correct, as the benign influences of good feeding seem to demonstrate in the case of most men. But the masculine sex is no exception to the penalty of mental and pathological disturbance resulting from abnormal continence. Men have presented unmistakable symptoms of hysteria, although the name indicates it to be a woman's disease; of hypochondria, and other ailments indicative of the disturbance of the nervous system. The intellectual faculties have suffered and prematurely perished; the force of character has withered like the right hand of King Jeroboam. To this cause has been attributed the peculiar sufferings of the poet, William Cowper,

and the eccentric, half insane conduct of Swift, Pope and others. Phthisis has been simulated and perhaps induced, and a long array of diseases can be enumerated, for all which this irritating cause is responsible.

Many writers do not hesitate to attribute these evils to masturbation, a practice carrying a load of accountability as heavy as the burden on the shoulders of John Bunyan's pilgrim. It is indeed a practice to be deprecated, resisted, and as far as possible extirpated; but it is not, as they seem to indicate, the guilty cause of all these woes.

Some professed physiologists remind us that the same forces which are employed in the exercise of the sexual function may act vicariously, and obtain relief by some manual or intellectual labor. Sir Isaac Newton has often been cited as an example, and yet he was erratic on the subject of biblical exegesis. We are indisposed to argument in this direction, believing as we do that the normal recourse in the case is found only in connubial life.

We deprecate heartily the notion that sexual ideas are not modest, and that the sexual relation is deteriorating to the spiritual and moral nature. In our view, the affections constitute the entity of the life itself, and their normal exercise is essential to health and is the condition on which we enjoy the blessings of existence. There is a golden medium between degrading sensuality on the one hand and mawkish asceticism on the other, with all their mischiefs. The all-wise Creator had a design in this matter, and our compliance with the behests of this function is essential to the furtherance of His plans. There is no virtue, no genuine morality, no "pure and undefiled religion" in going counter to them. The law of God in this matter is written in our nature, and it behooves us, as true men and women, to yield to it a reverent and intelligent obedience, mindful of the suggestion of the old Chaldean, that God called the twofold unit the male and female Adam, or Man, in the day when He so created them in His image, and so formed them in the very likeness of the Divine.

It is impious, aye, sacrilegious, to mention with disrespect the attraction which renders a person of one sex agreeable to an individual of the other, or to speak of love between them as unclean and humiliating. Let society take off its ban and relax its requirements upon individuals to acquire great riches and maintain a position in society as if possessing wealth; so that we may have genuine social

relations and parentage without conflict with other important interests. We want the benignant sway of that higher law of humanity, in its fullest meaning: "Whom God hath joined let no man divide."

Vestals are they before the Lord
Whose souls are pure; the vestal fire
Is not, as some misread the Word,
By marriage quenched, but burns the higher.

THE SICK ROOM; THE NURSE; THE DOCTOR.

By M. M. Fenner, M. D.

An experience of a dozen years in ministering to the sick and the sick room, added to a knowledge of the current published literature appertaining thereto, ought to give opportunity for observation and the accumulation of a fund of matured information that would be useful so those having their management, or liable to have them in charge. As society is now constituted, any person is liable at a moment's warning to be called upon to act in the capacity of nurse, and so take into charge the management of the sick and the sick room. The nursing of the sick ought to be a profession the same as school-teaching is. As we have normal schools for educating and training teachers to render them competent to train and manage the juvenile mind, so we should have schools for the education and training of those who are to care for us in sickness; to watch over us and minister to us in that important hour of our weakness and helplessness, when life, more than ever "hangs upon a thread." The demands of an ever exacting civilization, however, draw more and more heavily upon the resources of the people, and the expensiveness of a system of professional nurses is an objection that must preclude their general introduction for a long period of time, if not, indeed, forever; and the important duties of the nurse must thus continue to be discharged, generally, in the future, as they have been in the past, by those who most conveniently can be allotted to the service. The cardinal principles of good nursing may, therefore, properly form the subject-matter of a popular address, and will be enumerated as it is thought their importance warrants, hurriedly, and in conversational style, without any ambition for oratorical flourish, and, indeed, with little regard for the elegancies of rhetoric.

It would be impossible, if it were desirable, to do much in the way of rhetorical embellishment of such unpoetic, though important, commonplace as "proper diet for the sick," "hot foot baths," "hop and corn meal poultices," and "mustard paste."

The importance of good nursing is now generally conceded; but owing to a want of proper knowledge on the subject, and the necessary conveniences, it is seldom well carried into practical effect. If evidence were needed of its importance, it would be only necessary to point to the bills of mortality attending camp and military hospital sickness, as they have been made up from service in our late civil war. Unknown thousands of unhappy victims of disease or wounds are known there to have sunk to their last rest *through no necessities of their diseases or wounds, through no fault of their attending physicians or surgeons,* but *solely to the want of being properly placed in relation to the common needs of their being at a critical time;* in other words, *the want of intelligent and attentive nursing.* These cases passed under the observation of the world, and a knowledge of them could not be concealed from the country. How many such cases are daily occurring in civil medical practice everywhere around us, in the midst of well meaning but untaught and unskilled nurses, unobserved, because the faults of attendance are unknown?

As disease is more studied, and its nature more thoroughly understood, the old idea that it is a thing foreign to the animal economy and must be "rooted out," is coming to be abandoned. The more rational explanation is that it is not an *entity* but a *condition;* the outward manifestation of an effort of nature to repair injuries to structures occasioned by violence from without, or noxious materials acting prejudicially upon the various tissues through the circulating blood within.

It is a fact perfectly susceptible of demonstration, if indeed its bare enunciation will not commend it to the belief of every thinking mind, that most of the pain and suffering attendant upon disease, most of the protractedness of disease, and, what is of yet greater importance, most of the absolute danger attending disease derive their being from no necessity of the morbid action itself, but simply and solely from the lack of a proper application of, or enjoyment on the part of the patient, of some one or more of those well known needs of the body in health as well as in disease, viz.: warmth, cold, dryness, moisture, nourishment, drink, air, light, sunshine, cheerfulness, rest, quiet, encouragement, sleep; and the suffering results in disease more than in health only because the diseased system is less able to sustain or resist, than the healthy one.

Thus, for an example, take the patient sick of an acute attack of pleurisy; perhaps one of the most painful diseases known to the cata-

logue. He may pass the day and early night comfortably, but awakens in the early morning sustaining the most acute suffering, An examination will disclose the fact that he has been chilled. This is that period of the day when the temperature is lowest; so also are the vital forces of the body, as they are then receiving less support from the nourishment of the previous day. The fire gets down and the clothes have perhaps been partially cast off, from the warmth of the earlier hours. The nurse has become heavy in sleep and inattentive. The blood gradually recedes from the surface of the body and occupies and oppresses the great central organ. It passes freely into, and engorges and strains the diseased pleura, and the result is *insufferable pain* and further injury to the diseased tissue. Now, in health, the effects of this cold might have been resisted, giving rise to nothing more than an uncomfortable sense of chilliness. But the diseased pleura is in no condition to resist this ingress of blood, and indicates the attack by pain from excessive pressure upon its sensitive nerves. Now the application of a large hot poultice of corn meal and hops, neatly placed in a bag large enough to envelop the affected side, and thick enough to hold heat for an hour, covered in with dry, thick flannels, will send a current of warmth through the engorged and stiffened tissues. Relaxation ensues; the blood is sent coursing away from the engorged lungs, liver and stomach through the distant capillary vessels, which now become filled with blood in the skin and tissues nearer the surface, to the relief of the action of the organs within. A general perspiration or sweating ensues, the pain is relieved entirely and the patient comfortably sleeps; just what he ought all the time to have done, and what he would have done, had not this accident occurred. *Accident*, we say, *because this whole trouble was no necessary part of the disease.* Generally it would be said that the patient was taken worse in the night, his disease giving rise to a severe pain and anxiety, that caused him a bad night. It got easier in the morning, and he rested. Fears would be expressed, that he would not be able to survive such another night. Well, he ought not to. He ought not to have survived this one, nor to have had it at all. It was no necessary part of the disease, but the penalty of having to employ an incompetent or inattentive nurse. No censure is meant, however, because people are not all natural nurses. Some are, but others have to be taught. Nursing is not taught, except in the casual directions of the doctor. It is hoped it sometime will be, and that such accidents as have been here mentioned,

will cease to worry and endanger the sick. This was an accident for which the doctor would usually be sent for, through the darkness of night, miles away; but it was one the nurse should never have allowed to occur, and if it did unfortunately occur, should have relieved in the manner related, without the aid of a doctor.

Thus disease may go on through its course, when the patient is submitted to the proper sanitary conditions, by the intelligent nurse and physician, quickly, safely and without causing suffering, to its resolution in health.

In this view of disease, the importance of aiding nature in her restorative endeavors, by placing the patient under those sanitary influences most conducive to a restoration to health, is at once apparent, and to bring about this desired end should be the object and aim both of the physician and the nurse.

THE NURSE.

The pronoun "she" is usually employed in designating the nurse, because woman is the most apt to be employed, being generally the most efficient in that capacity. Men can render themselves efficient and useful, however, and they ought to do so, as their services must often be required. The nurse to whom we intrust the care of our sick, should understand the principles and also the practice of good nursing. When the medical attendant directs the application of a hot foot bath, a mustard paste, a warm bath, a sponge bath, a hot poultice, she should not only know precisely how to go about it to do the work well, but she should know the principles on account of which it is directed; knowing these, she will be able to carry it to an extent sufficient, and no further, to accomplish the whole and no more of the object for which it was prescribed. Otherwise, the physician must explain the minutest detail in every case; a duty that draws heavily on his time and patience, and one he can ill afford at a time of much sickness, and when these measures are in greatest demand. Besides, even then, contingencies may arise that were unforeseen, to frustrate the untaught nurse, and the physician will often return to find his patient no better, perhaps, even worse, on account of the bad execution of his measures of nursing. The mustard paste may have been improperly made, so that it would not "draw," for instance, and kept wet about the patient, till he takes a cold from it; perhaps he takes a cold from sitting in a foot bath till it got cool, when it should have been kept hot, and so on *ad infinitum;* all of which

shows the importance of popular instruction in the principles of good nursing. The nurse should be a person of sense; in other words, as Dr. Holland puts it, a person of "gumption." These words have great force, and the qualities they comprehend, "cover a multitude of sins." Published works on nursing enumerate a great many details, which the nurse is enjoined to look after; such, for instance, as to exercise care not to slop the tea into the saucer, as the patient then would have to carry cup and saucer both to his mouth, or get his bed and gown soiled by the drippings, either of which would irritate and tire him. Never speak to a patient from behind, so that he will have to strain his eyes or change his posture, in an endeavor to see you. Details of this class, will not be touched upon, on this occasion; the whole category being covered by enjoining upon the patient or his friends the employment of a nurse of sense or "gumption."

For the most obvious of reasons, none of which need be referred to here, the nurse should be intelligent, thoughtful, kindly, comely, interested, tidy, cheerful, ambitious. She should be quiet, firm, courteous, never boisterous, never trifling, never disconcerted in her intercourse with the patient. His condition is one of painful reality to him; let her demeanor always be such as to inspire confidence, hope, respect.

Office of the Nurse.

The nurse I have introduced, is an ideal one. Let each of us, who may have the care of the sick in our charge, approach as nearly to the picture as may be. We can all be earnest, sensible, thoughtful, kindly. The office of the nurse, then, may be set down to be the management of the sick patient, so that all the natural influences of existence, such as fresh air, light, warmth, quiet, cleanliness, may be brought properly to bear on him, to the end that nature may proceed unobstructed in her efforts toward restoration to health.

Relative Importance of Physician and Nurse.

The question has been debated as to the relative importance of the physician and nurse. We will not discuss it, but merely remark that it is now known that most acute diseases will terminate favorably with the aid of good nursing, whereas it is equally clear that the efforts of the otherwise most successful physician may be rendered futile by a careless, untaught, inattentive nurse. Further on in these remarks some special reference will be made to the medical man.

At present he will be referred to only incidentally in treating of the sick room, the nurse being now the prominent personage. It will be proper here to state, however, that the attendance both of the careful physician and the attentive nurse upon the patient is necessary in order to his highest welfare.

As has been before remarked, schools for obtaining a thorough knowledge of the principles of good nursing, and hospital facilities for the acquirement of skill in their practical application ought to be instituted, whereas professional nurses might be educated in such numbers as to supply the demand for their services. But as such is not the case to any considerable extent, and as few professional nurses can be found, especially in inland towns and country places, to whose care we would willingly consign those near and dear to us when afflicted with disease, it becomes necessary at times for *every* adult person to care for the sick, and consequently all people ought to understand clearly the principles of good nursing, which they may easily do by a little attention to the subject. To aid in popularizing and disseminating information thus indispensable to the well-being of mankind, has been the principal object kept in view in the preparation of this address. It is hoped that the weight of responsibility incident to the undertaking has been sufficiently felt. It is realized that no one can speak without exerting an influence for good or for evil. That the teachings here set forth shall be scrupulously correct, or entirely faultless, cannot for a moment be expected, but that they shall be sound in principle and practically correct in detail, we hold ourself to a strict accountability.

THE PATIENT.

Stricken with disease, the patient enters the sick chamber. He is devoid of that strength of body that has been the pride of his manhood. His frame is weak and helpless; he has pains and aches that constantly irritate, if indeed they are not well nigh insufferable. His mind is also weak, irritated and child-like. The strong judgment and will-power that commanded respect in health give place to vacillation, petulance, anxiety. In this humiliated, broken-down condition the nurse finds her patient, and inquires what can be done toward the amelioration of his infirmities, the stay of his disease, the restoration to health, strength, manhood.

The Sick Room.

The sick room should be always cheerful, and its influences and inspirations such as to fill it with cheerfulness. It should be comfortable in size and appointments, even though it take the best room in the house. Sickness naturally suggests to the afflicted that dire alternative that he realizes some time or other must follow. Such a reflection is not pleasant to him, and it is far from being conducive to speedy recovery. Let not his anxiety be rendered insufferable by squalid apartments, inattention, thoughtlessness, discouragement, gloom. A room twelve feet square is not too large; but if it cannot be afforded, let the best thing possible be done in this direction. Have a fire in the room by all means, a fireplace if possible. This renders the room more cheerful, at the same time that it affords the requisite warmth, dissipates dampness, and assists in ventilation. Even in the warm summer months, there are few nights, in this climate, whose air is not too chill for the comfort and welfare of the patient, without artificial heat. Especially is this the case at any season of the year during that period of the day when the temperature is lowest and the vitality of the patient most reduced: the early morning. Let the ceiling and walls be white and comely, even if they have to be whitewashed for the occasion. They are thus more cheerful, and will help to beget a cheerful spirit in the patient, a consideration of no little importance, besides being more wholesome. Let there be little or no unnecessary furniture in the room. Do not allow clothing hung up about the walls, or unnecessary dishes or bottles of medicine to accumulate. The emanations from the body are retained in the sick room in proportion to the accumulations of these things, and the moisture of the atmosphere. It is of great importance that attention be given to the sick bed. Feathers are not suitable to lie on, both because of the tenacity with which they retain the effete animal emanations, and because of their undue warmth. A mattress of husks, or sea grass, or, in default of these, a good newly-filled straw bed, covered with quilts of cotton wool and calico will be the proper material. The bed should be moved out from the wall toward the center of the room. This will both prevent the contamination of the walls from the emanations of the disease, and permit a free movement about the bed so necessary in the cure of the patient. It will be better that the carpet be removed from the floor of the sick room. The reason of this is evident; emanations from the sick, and all unwholesome emanations, adhere to woolen stuffs with great tenacity, and the coloring matter of the carpets always vitiate the air.

PURE AIR.

Keep the air in the sick room as pure as the open air without. On taking charge of the sick room, the first and most important subject that should engage the attention of the nurse is that of ventilation. Fresh air is the imperative want of the sick room, the thing first, last and all the time to be thought of; the one thing needful. Persons live more by their lungs than their stomachs. The animal economy requires pure oxygen from the air to sustain life in health. How much more must it be necessary to support the flagging powers in disease? How this can be accomplished in all cases, will often tax the ingenuity of the nurse to the uttermost. A large airy room is of the first importance; then, a fireplace having a fire constantly burning in it, and a hoisted window, the thing is easily managed. The window should be kept at such a height that the fresh air will enter and pass over the room to its escape through the fireplace in such quantities that while it shall not be allowed to hasten itself into a "draught," it may yet be felt by the experienced nurse to move gently in the room. Sufficient fire must be kept up to maintain an even temperature by warming the fresh air as it enters, and thereby avoid chilling the patient. A patient, covered in bed, unless, indeed, he is bathed in perspiration, is in little danger of taking cold. Especially is this the case if the disease be of an inflammatory or febrile nature, except in the last or convalescent stages. In admitting fresh air into the sick room it is important to know that it is *pure;* that it comes from *without*, and not from some musty, unventilated or otherwise used hall or room within, and that it does not pass over the back yard, drains, cess-pools or other filthy places. By all means possible, let it come from the sunny side of the house. Where there is not the convenience of the fireplace, and where the room is small, as often must happen, great difficulty will be experienced in the endeavor to secure to the patient good ventilation. If possible, let him be removed into a larger room. Have a fire of *some kind constantly burning*, except in very warm weather, and then manage to introduce continually fresh air from without. In very warm weather an aperture for escape of the tainted air should be had other than the fireplace or stove, especially in the day time. It is commonly the habit to close up the room at night. This is wrong. The invigorating effect of fresh air is needed even more at night when the powers of the system are lowered in sleep; and this can be obtained only from without. It is necessary to health; it is

indispensable to the sick. To show how readily the air of an apartment becomes contaminated with impurities, it will be instructing to note some physiological facts from standard publications.

"No physiologist pretends that less than seven cubic feet of air are adequate for a man to breathe each minute, while Dr. Reid allows ten." "Air which contains more than three and a half per cent of carbonic acid is unfit for respiration, and since air once respired contains eight and a half per cent, it clearly shows that it is not fitted to be breathed again." Such are the teachings of the most advanced physiologists of the day. Moreover, besides the lungs as a contaminating source of the air, the skin is an important organ to take into consideration. Its under surface is thickly studded with little glands (sweat-glands) which communicate with the outer surface by means of minute ducts or tubes. It is computed that there are no fewer than 7,000,000 of these little glands in the skin of the human body, and that their tortuous and spirally configured ducts, if all put into a continuous line, would measure *twenty-eight miles.* It is the office of these glands to strain off water from the blood, charged with saline and effete animal matters that are of use no longer to the system, and these little tubes conduct it to the surface, generally in the form of insensible vapor (exhaustion); but when the body is over heated or relaxed it issues forth in drops of perspiration (sweat). The amount of this exhalation is shown by actual experiment to be from the skin about *eleven grains* per minute, or about *two and one-half pounds* in twenty-four hours. That of the lungs is about *seven grains* per minute, or something more than a *pound* in twenty-four hours. Thus, is there a total exhalation from the skin and lungs together, of about *three and one-half pounds* of aqueous vapor charged with carbonic acid, saliva, and effete animal matter in twenty-four hours. How quickly the impurities thus arising will contaminate the atmosphere of inhabited apartments need only be thought of to be comprehended. And if it is important to observe these facts in health with reference to parlors, sitting-rooms, sleeping rooms, and places of public gatherings, as churches, school-houses and lecture-rooms, how much more important is its consideration with reference to the sick room, where the tendency to decomposition present in most diseases, renders the patient's exhalations and excretions doubly offensive, and doubly poisonous; and when his decaying physical and mental forces so much need the salutary and invigorating influence of pure, fresh air.

Forcibly as a moments consideration of this subject impresses us

with the necessity of observing it strictly, it is wonderful how little is the attention given to it, both in sickness and in health. How many houses can one enter from the fresh air, and be met by a confined, musty, sickly smell, especially in the rooms little used, where the windows are not daily opened, and the air remains for long periods unchanged. It is even more surprising and mortifying to see how universally it is disregarded in practice, in attending upon the sick. It seems a misfortune to them that dirty air cannot be seen like dirty water and dirty clothing. How often do we see the kind-hearted and tidily disposed nurse, watchful that her patient's bed linen is scrupulously clean, attentive that he is bathed in soft and pure water, but utterly oblivious to the fact that his small, shut-up room, is making him breathe an atmosphere thick with impurities, loaded with the offensive exhalations from his distempered body, completely surcharged with infection, that may not only make herself a victim of her ignorance, but constantly poisons and repoisons the body from which it arises, at the same time that it keeps from him the pure element so much needed in his restoration. If he becomes faint, some brandy is at hand. If restless and irritable, an opiate is kindly administered, and he is rendered oblivious to what he breathes. If his sensibilities have finally become altogether blunted by the continuous action through the medium of the blood, of the bad air on his brain, and stupor attends, from which he can only with difficulty be aroused, then his liver, skin and bowels are acted upon by powerful medicines to remove from his blood the material which deadens his brain, and which should never have been allowed to enter it through his lungs.

Let all nurses, then, and everybody who has to do with the sick, be keenly alive to the subject of ventilating and purifying the sick room. Let not the sufferer from disease be made to further suffer for want of what nature supplies so pure, so fresh, so bountifully. Let a window be raised from the bottom to introduce air. If there is no fire-flue with a fire gently burning in it, let a window be lowered from the top at the opposite side of the room for the escape of the used and heated air. As has already been said, except in very warm weather, and even then, during the early hours of the morning, there must be a fire in the room to warm the cool fresh air as it enters. It is a popular error, that has a very wide currency, that sick, and, indeed, all inhabited rooms, should be ventilated rather with reference to degrees of temperature than degrees of purity. It is

thought that a warm room needs to be aired, while a cold room will bear closed doors, windows and ventilators. This is a mistake. Cold air becomes contaminated as readily as warm, and needs to be as constantly changing. It is not here claimed that ordinary errors of ventilation will suddenly destroy life. The system has, fortunately, a great tolerance of variation from its normal standard. It will tolerate temporarily a degree of heat, for instance, which, in time would enervate, sicken, and undermine the health. Precisely so of impure air. An instance of such tolerance is the famous "black hole," of Calcutta. I remember an instance in point. During the late war, while an army officer, attached to General Gilmore's staff in South Carolina, I had occasion, one sultry summer morning at an early hour to arouse some negro boatmen, to row a party of us from By Point, across Fort Royal to Hilton Head. There was a large number of colored people sleeping in their cabin together, which was shut up as tightly as possible. The air thus issued forth from the opened door was, to me, stifling beyond endurance. It did not seem I could have lived inside an hour. In reply to my inquiry, why they excluded the air so completely, Sambo characteristically and somewhat impatiently exclaimed, "*Great God Massa, the 'Sketers.*" Remembering Uncle Samuel had not furnished his colored laborers the indispensable mosquito-bars, as he had us more highly favored soldiers of that region, I had nothing more to say.

Light.

No organic growth can develop properly or long maintain its integrity unimpaired, without the aid of sun-light. As the potatoe-sprout grows up a frail, sickly stalk in the imperfect light of the cellar, so the child reared in a poorly lighted tenement, develops to little more than a pale, puny, sickly body of scrofulous or consumptive habit, of too feeble power ever to make himself felt in the affairs of the world, if, indeed, he is not cut off by disease in childhood or early youth. *Too much shade about a house, otherwise well lighted, is a grave mistake.* By the published statistics of Forest Hill Cemetery, Fredonia, it is seen that one-fourth of all the interments for the past year resulted from *consumption.* This is a startling proportion of the whole number of deaths for that one form of scrofulous disease. Who can deny that the luxuriant shade of which our village prides herself, and which in summer renders her truly beautiful to look upon, by forbidding the entrance of the direct sun-light rays,

and thus permitting only a *soft dim light*, and an atmosphere damp and musty, molding instead of drying objects having moisture about them, has much to do, if not, indeed, nearly everything to do, in silently bringing about this result? *Dampness of the soil and absence of sun-light*, are known to be *the most prolific causes of consumption and scrofula in general.*

This is a subject fraught with so much importance to everybody, and especially to those rearing families, that we cannot forbear the inclination, even at the risk of being thought tedious, to quote from an excellent and truthful article by Dr. H. T. Bowditch, of Boston, published in three numbers of the Atlantic Monthly of last year, entitled "Consumption in America." Speaking of the causes of consumption, he includes *wetness of the soil* and *absence of sunlight* as chief among them, and says: "We know of two families in Massachusetts of whom the following story may be told. Two healthy brothers married two healthy sisters. Both had large families of children. One lived on the old homestead, on the southern slope of one of the numerous beautiful and well drained hills in that vicinity. The whole house was bathed all day long in sunlight, and consumption did not touch any of the young lives under its roof. The other brother placed his house at a very short distance off, but upon a grassy plain, covered all summer with the rankest verdure. In its front was a large open common. In the center of this, water oozed up from between the split hoofs of the cows, as they came lowing homeward at evening, and the barefooted boy who was driving them used to shrink from the place, and preferred to make the circuit of its edge rather than to follow the lead of his more quiet comrades. Back of the house was a large level meadow, reaching to the very foundation of the building. Through this meadow sluggishly crept the mill-stream of the adjacent village. Still further, all these surroundings were enclosed by lofty hills. The life-giving sun rose later and set earlier upon this than upon the other fair homestead. Till late in the forenoon, and long before sunset left the hillside home, damp and chilling emanations arose from the meadow, and day after day enveloped the tender forms of the children that *were trying in vain to grow* up healthily within them. But all effort was useless. Large families were born under both roofs. But one of the children born in the latter homestead escaped, whereas the other family remained healthy; and when, at the suggestion of a medical friend who knew all the facts we have told, we visited the place for

the purpose of thoroughly investigating them, we thought that these two houses were a terribly significant illustration of the existence of this all-powerful law. Yet these two homes had nothing peculiarly noticeable by the passing stranger. They were situated in the same township, and within a very short distance one from the other, and scarcely any one in the village with whom we spoke on the subject agreed with us in our opinion that it was location alone, or chiefly that, which gave life or death to the inmates of the two.

"We might speak of other homesteads which seem to us now to be the very nests of consumption in consequence of this law, and yet not one parent in a hundred acknowledges even theoretically his belief in the truth of our assertion. Parents themselves, during a long residence, may escape from the dire influences of location; and therefore they imagine, if their children are failing, that some other evil agency is at work, rather than this law.

"Illustrative of this error on the part of parents, we cannot forbear relating the following fact: We know of a house situated about a foot above and just on the edge of a small lake. The cellar, if there be one, must be below the level of the water. The house, built with taste, nestles, amid overhanging thickly-leaved trees, through which the sun's rays can scarcely penetrate even at midday. The homestead is overrun with the springing woodbine, clematis and honeysuckle. Coolness, dampness, and little sunlight, are the characteristics of the spot. In the midst of summer it is the *beau-ideal* of a quiet, refined country house, which any one, even the most fastidious, would desire to occupy. Yet, as we have looked at it, and have remembered how one by one the children born in it have been cut off by consumption, either at puberty or early manhood or womanhood, we have turned with loathing from all its external beauties, and have regarded them all as so many false and fatal allurements, bringing inevitable ruin to those who fell within the sphere of their influence.

"These tales are no creation of our imagination, but positive and undeniable facts."

After having thus listened to the extract from Dr. Bowditch's paper, which is a most excellent one, and embodies the results of the Massachusetts State Medical Society's investigations into the subject, treated upon for a century, no apology is needed for detaining you with its introduction.

If sunlight is thus a necessary element or condition to the stocky,

thrifty growth of the plant and development of the child, it is also necessary to preserve their integrity while life exists. And it is especially necessary to the rapidly changing condition of the human frame, when affected by disease. Darkness, moreover, begets *gloom and despondency*, the conditions of mind of all others most depressing and hurtful to the sick, and first to be guarded against on the part of the nurse. A cheerful mind has more to do with the recovery of a patient than most people are aware of. Darkened rooms are, moreover, usually ill-ventilated, and liable to be unclean. Many patients prefer their apartments to be darkened on several accounts, as that the light hurts their eyes, induces headache, and begets wakefulness. We admit it may be temporarily comfortable to have a darkened sick chamber, but, with a full knowledge of the benefit of light, *let such chamber be a room situated in the south side of the house, where the sun's rays may shine on it early and late, and all the day long. Let the patient cover the eyes, when sensitive to light, with a thin colored fabric, take his rest by night, and forego the fancied comfort of a darkened sick room.* Air and light are the great natural, God-given invigorators of the physical frame, which the sick can not afford by any manner of means to do without. The cheerfulness which they impart, moreover, cannot, with safety, be dispensed with. Their free action, along with *cleanliness* and *warmth*, properly applied, will enable nature to do much toward the removal of disease, without the aid of the medical man.

WARMTH.

It is of the gravest importance that a proper temperature of the patient be always maintained. In the early stages of acute diseases there is usually an excess of animal heat, to allay which, frequent cool bathing and cooling draughts, slightly acidulated, as lemonade, give much relief and comfort. Later in the disease, however, there is a great decline in temperature. The powers of life are now enfeebled, and are greatly drawn upon to maintain the requisite degree of warmth. The blood ceases to circulate with sufficient vigor in the small vessels of the surface and extremities, and accumulates unduly in the great central organs of life. Thus, the extremities become cold, and the surface pallid; the patient receives a chill and rapidly sinks away. This is what is commonly called a "sinking-spell." Moreover, the internal organs, being overburdened with blood, suffer great oppression and distress. Many a patient has thus been allowed

to sink away and die in the latter stages of disease, and even during convalescence, solely on account of the ignorance or carelessness of the nurse, in the matter of the proper use of artificial warmth. In the early morning, unfortunately, when the nurse is least liable to bestow upon the patient the attention he requires, the accident is most liable to occur. Thus, many a patient has *fallen a victim to the drowsiness of his nurse at the critical moment*, and not seldom the attending physician has fallen under censure, if not altogether into disrepute, on account of it.

Let the patient then be closely watched at all hours of the day and night, during the latter stages of disease. Observe whether the *countenance be pinched, the lips pallid, the surface cool, the feet and limbs cold.* Let these attentions be most assiduous at from two to five o'clock in the morning, this being the time when they are most needed. Certainly every hour, often every five minutes, examine the feet, that they be sufficiently warm, and that the circulation through them is sufficiently free. Do not trust to the nourishment, medicine or stimulants to restore heat and circulation when found wanting. Always have access in the early morning to a good fire where bricks or stones are kept heated, and water is kept hot. Place hot bricks, rolled up in old cloths, or bottles of hot water, to the patient's feet, and also about his limbs and body, if need be. A little hot, stimulating drink can also be made and administered to restore the circulation, and frictions to the back and limbs be employed for the same purpose, if required. Do enough of these things to secure adequate warmth and vigor to the patient, and no more. *Judgment* and *sense* must be exercised in these as in other things. Do not entrust the care of your sick to one who has not got them.

Now these are large, living truths, ever have been such, ever will be. Though told hurriedly and in a homely way, they are not the less important. Had we time, we might illustrate their importance in many ways. As everybody has at times to do the duty of nurse, so everybody should bear them prominently in mind. Simple and commonplace as they may seem, ignorance of them, or inattention to them has caused, and it is feared will long continue to cause, thousands of untimely deaths and untold sorrowing and grief.

Quiet.

Quiet and rest are important considerations in the management of disease. Often during the later stages of lingering disease, and

generally during convalescence, such moderate exercise and gentle mental stimuli, as impart physical vigor and excite genial emotions, are in the highest sense useful. But during acute suffering and the more urgent and descending stages of grave maladies, strict quiet of mind and rest of body should be enjoined. How often is an approaching fever averted by timely rest in bed, accompanied by the application of some common sense principles of nursing? It is said of Napoleon I, that he seldom took medicine. When his great mind was fatigued by cares and responsibilities, his frame worn down by exhausting labor and privations, and he suspected the approach of disease, he was in the habit of shutting himself up from the outside world, refusing to see even his most intimate friends, and remaining thus in rigid quiet and seclusion for many hours, and even days, until nature had renovated and restored his physical frame.

It is not meant to discourage the use of proper means at the outset in warding off the insidious approach of disease. It *is* meant, however, to enjoin and urge, in the early approach of disease, the employment of those hygienic measures, quiet and calmness of mind, rest of body, fresh air, sunlight, cleanliness and warmth, which are nature's great health-giving and restorative agencies. These, with wholesome diet, abstinence from inappropriate and hurtful articles of food, and indulgence in such sustenance as is needed, and in such form as that it will be digested, will often be found sufficient to overcome and ward off the approach of grave disease, in constitutions less hard and resolute than that of the great Napoleon. How much better it were to observe these sanitary regulations in respect of one's person and surroundings, and thus often, if not always, *avoid disease*, with its attendant dangers and distresses, and its too often resulting poverty, broken constitution, sorrowing and death. The affluent can, and generally do, place themselves under the proper hygienic regulations to avert or alleviate disease; and though often of feeble frames, we see less of grave disease among them in civilized communities, than among the poorer classes. The poor man's labor is his capital for the maintenance of himself and family. He sees little time to devote to health and comfort. Over-worked in body and depressed in spirit, he continues to labor long after he is sensible of the approach of disease. Not seeing how he can suffer a sickness without utter destitution and ruin, he refuses to give up, and strives heroically to *work off* his disease. But all in vain. Sickness is upon him; too late he has yielded to the imperative demand. A few days

earlier, and a little rest, aided, perhaps, with some gentle and appropriate medical assistance, might have rallied his wasting energies, and avoided the exhausting sickness now fully upon him with all its pains, anxieties and impending fearful consequences.

Cleanliness.

A strict attention to cleanliness should always be kept in mind. Unless the condition of the patient is such as to forbid it, which will be rare indeed, a daily bath of pure soft water, or castile soap and water, or soda water, or vinegar and water, or salt or whiskey and water, as may be directed by the medical attendant, or thought best suited by the nurse, should always be understood as necessary. The water should be lukewarm, unless otherwise ordered, and followed by drying with a towel, and more or less friction over the dry surface, and especially up and down the spine with the palm of the dry hand. This imparts a vigor to the patient on account of the animal magnetism he receives. More bathing must be employed in fever to cool the patient. We are now only speaking of it so far as cleanliness demands. His gown must be daily changed, and more frequently, if it become wet with perspiration. He must be got into an easy chair or removed to a couch or another bed, for a time each day, to give an opportunity to air his bed and change his bed-linen. The imperative necessity for this procedure, will be apparent, when we recall the physiological fact heretofore mentioned, that two pounds and one-half of aqueous vapor, charged with effete or decaying animal matter, passes off from the skin, through the pores, every twenty-four hours. Where else can this go to, except to be absorbed by the bedding, thus to taint and dampen it? To leave the patient to lie in such a bed, would be to expose him to the danger of absorbing into his body again, through the skin, the noxious material that it had once thrown off, and also to other dangerous consequences, from the dampness of the bed. These things must not be aired in the sick room, as they would not thus be purified, and would contaminate the patient's air. They must be taken into the halls or altogether out of doors. They must also be nicely warmed and dried before being replaced. The patient's teeth, tongue, mouth and throat should be frequently cleansed with tooth brush and swab; his dry and parched lips lubricated with nice glycerin; hair combed, nails cleaned and beard frequently shaved. The room must be kept scrupulously clean. No odor of the excretions of the patient should be permitted to remain.

Have them removed always at once. Some of the most disgusting blunders of nursing are perpetrated by inattention to this particular. Do not permit the utensils to be emptied into the slop-bucket in the sick room, but remove them to the halls or out of doors for the purpose. Never bring a slop-bucket into a sick room. Never dry cloths or towels used about the patient in the sick room, as they contaminate and dampen the air. Never allow an accumulation of medicine and dishes. Do not permit *anything* in the sick room that can give off emanations to taint the atmosphere. The cellar should be in order and well aired. The drains should be looked to, that no foul emanation can arise from them, to spread contagion. All excretions from the patient should be removed to a distance, and disinfectants applied, if the disease is grave, or if it is a time of an epidemic.

Dampness.

Dampness must of course be avoided. Except under peculiar circumstances, which will always be designated by the physician, the air of the patient's room, and every thing about him, should be kept dry. Dry grounds for the location of the house, as has already been referred to in the quotation from the article by Dr. Bowditch, are of the highest moment in health, and still more important for the sick. The feeble form of the patient should on no account be enveloped by the damp miasms all the time arising from continually wet soil. So should the drains about the house and cellar be well aired and kept free, as well to avoid the dampness otherwise arising from them, as the hurtfulness of the stench with which their emanations are charged. By all means have a clean, well-aired cellar. Do not let that be a pest-hole from which arises, every time the cellar door is opened, volumes of damp miasm to taint the air of the house. Especially in the spring of the year should this be looked to, that they may not add their influence toward bringing on or aggravating the dysenteries and fevers of summer and the early autumn.

Scenery.

The scenery that can be afforded a patient sick of an acute disease must of necessity be limited, but even the little that can be done is everything to him. His room will be the pleasantest possible, situated in the south part of the house, so that the sun-rays all the day long may stream in through the windows, as has already been dwelt

upon. Do not let the walls and ceiling have a dingy look. If unfortunately so, they can be newly whitewashed, greatly to his comfort and the health of the apartment. Sometimes arrange the patient, when his strength will permit, which it nearly always will, so that he may have a pleasant look out of doors. Everything depends upon having a cheerful, comely, kind and courteous nurse. The nurse should not be an aged person. Old age is honorable, always looked upon with reverence and respect, and in health its presence may be sought and highly prized. In sickness it is too suggestive to the sensitive patient, and is liable to beget gloom and despondency. The scenery of the sick room will be wonderfully enhanced by the presence in it of a young or middle-aged, lively, kind, thoughtful, buxom, attentive nurse. Other decorations will be thought of by such a nurse, first among which is the placing upon the patient's table of a morning a fresh and tastefully arranged boquet of flowers! This may seem like small talk to the many, but I know those who have suffered from lingering and dangerous disease will say *amen* to it.

Sleep.

Leigh Hunt beautifully describes sleep: "It is a delightful moment certainly, that of being well nestled in bed, and feeling that you will drop gently to sleep. The good is to come — not past; the limbs have been just tired enough to render the remaining in one position delightful; the labor of the day is done. A gentle failure of the perceptions comes creeping over one; the spirit of consciousness disengages itself more and more with slow and hushing degrees, like a mother detaching her hand from that of her sleeping child; the mind seems to have a balmy lid closing over it, like the eye; 'tis closing— 'tis closed. The mysterious spirit has gone to take its rounds."

The Rev. Henry Ward Beecher illumines the subject thus: "There are thousands of busy people who die every year for want of sleep. It may be that too much sleep injures some, but in an excitable people and our intense business habits there is far more mischief from want of sleep than from too much of it. Sleeplessness becomes a disease. It is the precursor of insanity. When it does not reach that sad result, it is still full of peril, as well as of suffering. Thousands of men have been indebted for bad bargains, for lack of courage, for ineffectiveness, to loss of sleep.

"It is curious that all the popular practical representatives of sleeping and waking are the reverse of the truth. We speak of sleep as

the image of death, and of our waking hours as the image of life. But all activity is the result of some form of decomposition in the body. Every thought, still more, every emotion and volition, wastes some part of the nervous substance, precisely as flame is produced by wasting the fuel. It is the death of some part of the physical substance that produces the phenomena of intelligence and voluntary life.

"On the other hand sleep is not like death; for it is the period in which the waste of the system ceases, or is reduced to its minimum. Sleep repairs the wastes which waking hours have made. It rebuilds the system. The night is the repair shop of the body. Every part of the system is silently overhauled, and all the organs, tissues and substances are replenished. Waking consumes, sleep replaces; waking exhausts, sleep repairs; waking is death, sleep is life.

"The man who sleeps little, repairs little; if he sleeps poorly he repairs poorly. If he uses up in the day less than he accumulates at night, he will gain in health and vigor. If he uses up all that he gains at night, he will just hold his own. If he uses more by day than he gathers at night, he will lose. And if this last process be long continued, he must succumb. A man who would be a good worker must see to it that he is a good sleeper. Human life is like a mill; sometimes the stream is so copious that one needs care but little about his supply. Now often the stream that turns the mill needs to be economized. A dam is built to hold a large supply. The mill runs the pond pretty low through the day, but by shutting down the gate, the night refills the pond, and the wheels go merrily around the next day. Once in a while, when spring rains are copious and freshets overflow, the mill may run night and day; but this is rare. Ordinarily the mill should run by day, and the pond will fill up by night.

"A man has as much force in him as he has provided for by sleep. The quality of action, especially mental activity, depends upon the quality of sleep. If day time is the loom in which men weave their purposes, night is the time when the threads are laid in and the filling prepared.

"Every man must sleep according to his temperament. But eight hours is the average. If one requires a little more or a little less, he will find it out for himself. Whoever, by work, pleasure, sorrow, or by any other cause, is regularly diminishing his sleep, is destroying his life. A man may hold out for a time, but nature keeps those accounts, and no man can dodge her settlement.

"There is a great deal of intemperance besides that of tobacco, opium, or brandy. Men are dissipated, to overtax their system all day and undersleep every night. Some men are dissipated by physical stimulants, and some by social, and some by professional and commercial. But a man who dies of delirium tremens is no more a drunkard and a suicide than the lawyer, the minister, or the merchant, that work excessively all day and sleep but little at night."

Sleep at night must be secured. This matter ranks in importance with food and drink, and fresh air. If the patient can be made to sleep well at night, he will improve. It is worth more to him than all the medicine he can take. It may be laid down, right here, as an axiom (always true, except in cases of narcotic poisoning), *never wake a sleeping patient.* It is a popular notion, quite prevalent, that the patient who is very low must not be permitted to sleep longer than fifteen minutes, half an hour, or an hour at a time. It is thought to *tire him too much* if he is not awakened at intervals. This is a popular error. Sleep does not tire, but, as its name implies, it rests. The more sleep, the more rest, the more strength the nearer health. Keep the patient warm, with abundance of fresh air, and let him sleep on, sleep long if he will. Do not ask the doctor, who leaves medicine to be given every half hour, hour, or two hours, if you shall wake up the patient to give it. Always have it distinctly in mind, that you will not give the medicine until the patient wakes, unless there are special directions to the contrary. When the patient is awakened from his slumber, he will generally sleep lightly, or sleep not at all after it. If he does sleep lightly, and is occasionally awakened, he has had a broken night's rest, and feels the effect of it next day. A great deal might be said on the value of sleep, but there is not time to further consider it, and its importance will be readily appreciated by all. It is only necessary to reflect how the well person feels after a broken night's rest, to perceive its importance to the sick. Perhaps the patient cannot sleep. Let us see why. He may have a head-ache, with rush of blood to the head, and cold feet. If so, it is the fault of the nurse, who must correct it by hot applications to the feet and limbs, and bathing, and constantly fanning the head till cool. He may have a general irritability and restlessness. A tepid sponge bath, all over, with friction following, will rest and quiet him generally, so that he will sleep. Perhaps he suffers from pain of some internal organ. A hot poultice frequently changed and constantly pursued for a few hours, or even sometimes

for a few minutes, will almost always give relief, and sleep will follow. These measures failing, an anodyne may be given, which the careful physician has always left to be used, if required. Come what may, sleep must be secured.

Food and Drink.

Food and drink are important elements of nursing, and their importance rises as convalescence becomes established. During the early stages of acute disease, there will be little disposition on the part of the patient to take food. The judicious physician, however, will generally so manage that he can take suitable nourishment with a tolerable relish, and digest it. A thin Indian meal or wheat-flour gruel, cold or warm, as it pleases the patient best, is a good staple article during fevers and inflammations. Beef tea is not too nutritious to be tolerated at this time. Milk and buttermilk are now a favorite diet for these forms of disease, though they were once thought wholly inappropriate. Many patients take several pints a day with advantage. They would probably prove hurtful, were not provision made for aiding their digestion by the physician. This is, perhaps, a sufficient variety, though the thoughtful nurse will gratify her patient with other articles of a harmless nature, as barley water, toast water, rice water, and even soft boiled rice, with milk or cream and sugar, tapioca, sago, arrowroot, corn starch, and farina. The drink, unless there is some good reason to direct differently, may consist of plenty of pure cold water, good green or black tea, lemonade and wine. As convalescence becomes established, light and easily digested solid food can be taken. Indeed, something of this kind can be taken during the middle of the day (but not in the early morning or late in the afternoon or evening) by most patients, much earlier. The chief articles of reliance, in the way of solid food, are toasted bread, mashed potatoes, fish, chicken, oysters, steak, baked apple and rice. The taking of food must be managed with care. Everything depends upon its proper administration, and serious and even fatal relapses occasionally follow its too free indulgence.

One article of food I cannot forbear speaking of more at length here, in the interest of the chronic invalid, the person who is not much sick and never well. It is the most nourishing of all the various kinds of food, at the same time it is the most wholesome and withal very palatable to some people. I refer to Graham mush, or common minute pudding, made of Graham flour instead of Indian meal. It

is to be eaten with milk or cream and sugar. It should be taken largely for breakfast, and again for supper, if necessary. There is a class of people who suffer much from sick headaches, nausea, and sometimes vomiting, constipation and sour stomach, and feeling of weight and soreness over the pit of the stomach, and indigestion. They will tell you they suffer from "bilious turns." Now Graham mush is a cheap and strong diet, and it will cure these sufferings generally of itself, especially if aided by an avoidance of much meat, such as fat pork and grease. Try it.

Special Agencies.

It had been the desire to describe a few of these special agencies, a knowledge of which, together with their usual application to the sick, is within the province of the nurse. The agencies in question are the mustard paste, the hot foot-bath, the hot poultice (which is more valuable and less troublesome than the usual hot fomentations of hops and smartweed), the sponge bath, and the warm bath; the latter, most efficient means, being the one thing of all others needful in diseases of infancy and childhood. The length of the remarks already made, will prevent more than this naming of them, with the further suggestion, that some attention to their uses on the part of the community, would save much suffering and much sending for the doctor.

Visiting the Sick.

A few words now, with reference to visiting the sick, and we leave the consideration of the nurse and the sick room, hoping some thoughts may have been offered that will prove profitable to the afflicted, and aid those having the management in charge. In these remarks, the importance to the sick of such physical agencies, as pure air, light, warmth, cleanliness of person, and wholesomeness of surroundings, has been dwelt upon and urged somewhat at length. We all know how easy it is to breed a pestilence in the vicinity of the sick, by inattention to these things, or to secure comparative immunity by scrupulously attending to them. Their importance can be measured only by the value of life itself, and should be constantly kept in mind. Of scarcely less importance is a proper attention to the mental condition of the patient. A mind, ill at ease, is a condition prejudicial to speedy recovery, and the first step taken by a judicious physician or an experienced nurse toward the attainment of such recovery, is the securing of mental composure. Mental *inertia*,

except, indeed, it be in disease of the brain itself, is not asked for. Moderate mental impressions, agreeable in character, breaks the monotony of the sick room, and promote the welfare of the patient. These the judicious nurse will encourage from her own lips, as well as through the visiting friends. But all mental impressions, not agreeable to the patient, do harm and hinder recovery to the extent of the annoyance they give rise to. Those caring for the sick, therefore, and particularly those visiting them, should constantly bear this in mind. If you cannot excite agreeable emotions, endeavor to excite none at all. If you cannot make a patient feel happier, by visiting him, do not, by any manner of means, visit him at all.

Visiting the sick, especially in the country, is done too much. Kindly disposed people go to the sick room with the very best intentions, but, by the annoyance they unconsciously cause, directly lessen, and many times wholly preclude recovery. Especially is this the case of a Sunday. We always feel fortunate if our patients are not worse Mondays, notwithstanding all precautionary directions for the previous Sunday. Many persons, who ought to know better, are indiscreet enough to enter the sick room of a nervous hypochondriac, and remark, sympathizingly, "How really bad you are," and turn to the nurse or a friend in attendance, and assure her the patient has failed greatly since yesterday. We would hardly believe this, had we not repeatedly seen it done. Of course, the patient does not want to die. In his weakness of mind, this seems for the moment to decide his fate. If he has been seen to fail so much since yesterday, he cannot but query, with tremulous solicitude, where the morrow will find him. A depressing thrill runs over his whole frame, and he is worse, at least till some kind friend or the doctor tells him to the contrary. People visiting the sick should be steady, cheerful and sustaining. Talk what you like or what you must, out of sight and hearing of the patient, but do not lessen his chances of recovery by a single hurry, look, act or word of discouragement.

THE DOCTOR.

If we should not have relieved our audience by terminating this lecture a half hour ago, we ought certainly to do so now, and it is with unfeigned reluctance and distrust that we yet detain you, even though but a moment, for at least a seeming compliance in good faith with the terms of the announcement, in a few hurried paragraphs addressed to the special consideration of the medical man.

The doctor should be an educated man, a business man, and preëminently, a man of the world. His education should be drawn largely from *books*, in which are found recorded medical literature from its foundation as a science, and all medical, anatomical and surgical facts arising from the observation and scientific research of the entire medical faculty for all previous time. It should be drawn *more* largely, however, from the outer world; the results of his own observations and experiences among men in sickness and in health. The former class of knowledge — book knowledge — is or ought to be the common possession of all medical men. The latter — the knowledge of experience — is given in a superior degree to few; and this is unfortunate, for it is that element of their education which will determine very accurately their degree of success in proportion as they have it or have it not. The doctor should be a *business* man, as it is this element alone of his education which will keep him from pecuniary embarrassment, if not from absolute want; circumstances governing, whether justly or not, the opinion of the world in its estimate of his fitness to be trusted with grave responsibilities. He must be a man of the world, by which is meant he must mingle in society with his fellowmen of the diverse callings in life, and profit by his experiences; yet to know human nature most thoroughly, so that he may read character at a glance, and be able to impress each of the varied characters he may meet in the right way, to inspire that belief and confidence in himself so necessary to his own success and the welfare of his patients. He may be the wisest of men in acquirements, and prescribe the most accurately and justly, and then fail miserably because disease is at least half mental and he has not the address, tact, presence, assurance, or whatever you please to call it, to inspire confidence in himself. This quality is acquired, frequently, however, by the most ignorant pretenders to medical science, and carried to so high a degree of perfection as to make them intensely popular, and withal, passably or even more than ordinarily successful. They would surpass in number and attachment of patients, and possibly in the alleviation and cure of disease, many of the most astute professors of our colleges in a fair field of general practice, on account of this art they possess and the professors' lack of it. It is a good quality to have and to cultivate, and it is only to be regretted that the pretender so accomplished in it had not also given equal attention to the more solid work of his education. It is equally to be regretted that the professor or other learned but unpopular doctor had not

thought it worth his while to cultivate and perfect himself in this art that must certainly determine his success or otherwise as a physician, as the great Pitt thought it worth *his* while to cultivate the art of oratory before his mirror. It is that element of the physician that addresses itself to the mental or psychological condition of the patient, and this is frequently the most important element in the disease. A case in point occurs to me now. In my early practice I had been treating a nervous, fidgety, hysterical female, of an excellent mind and great moral worth however, for a long time for a variety of ailments. She was bad now here and then there and everywhere, and my prescriptions were just and scientific deductions from her statements, and ought to have relieved and cured her, but they did not. The more candid and scientific I was the worse she got, until finally, out of all manner of patience one day, as I arrived with my pockets distended with well-filled bottles of medicine which I had thought exactly adapted to her case, and found her worse, I resolved to try an expedient, in which commodity I was not very fertile at that early age, and take home my valuable medicine that was doing her no good. I communicated the fact to her, that I observed a decided change in her disease. The medicine I had prepared would not be at all adapted to her now. I saw precisely what it was ailed her, and would prepare some drops in a vial that would give instant relief and ultimate recovery. I assured her I could determine it with certainty by the appearance of her tongue. I called for a half-pint bottle, filled it with water, and dropped into it one drop of a nearly inert tincture. Being of alcohol, it took a rapid, tortuous and bead-like course to the bottom of the vial, all of which the good woman watched and then remarked, "It must be very powerful." I shook the bottle several times, looked at it carefully and then shook it again twice. I assumed as much gravity and wisdom as was possible for a youth of my parts to do; shook my head mysteriously and replied that the medicine possessed virtue, as she would be made immediately aware on swallowing it. I told her it would pass over her system almost the instant it was swallowed; that she would feel it as she would an electric shock, penetrating the very ends of her fingers and toes, and pervading the entire system even in its minutest fibres and nerves. It would not, however, in the dose I should name to her, be dangerous. A sense of relief from her sufferings would begin within a minute after it was taken. I had had great experience, though young, in the use of this remedy for the relief of precisely

her present condition, and I always prescribed it with certainty. I had prepared it so that one teaspoonful would be a dose, and it must be taken at precisely 6 and 10 A. M., and 2 and 6 P. M. She must not commence, however, with more than twenty drops, and she might increase as she could bear it. She looked at me with wonder and astonishment, if not with admiration. I bid her good morning, and told her I would see her again in one week. On my return, she met me at the door and exclaimed: "Doctor, you have hit my case at last; I begin to feel like myself again!" I listened to her story attentively, assenting, as she proceeded, and averring that I knew beforehand that precisely that result would follow. She had not dared to begin with twenty drops, but had first taken ten. The medicine produced the same effect I had told her, so far as I had told her at all, viz., the electric shock, the tingling of the extremities, which then merged into all the tissues of the body, whereupon she could sensibly experience a yielding or "letting go," as she called it, of her oppressions, bad feelings and infirmities. She had never yet taken over twenty drops at a dose, and she dared not increase. I weakened the remaining medicine so that she could take a teaspoonful, upon which she continued to a speedy and permanent recovery, and to this day gives me credit for saving her life. I have never told her of the deception, because I did not wish to lose her confidence. Perhaps I ought not to call it deception. Her disease was a psychological one, and not physical. My remedy was psychological, aimed directly at it, and took effect in bringing about the most happy result.

The physician must possess industry, perseverence, ambition, in a word, all those qualities necessary to the attainment of "*self-culture and self-control.*" He must be a cheerful man, a man of comely and not repulsive appearance, and a young man, or man of middle age. Medical science is not completed. Hence, it is all the time advancing. It is contrary to nature for the elderly man to keep up his study and research, as does the man in early or middle life. He, therefore, becomes, in a degree, incompetent, and loses the confidence and patronage of those who had long been his warm friends and supporters. This is a source of chagrin and mortification to him; he becomes soured in disposition, and embittered toward his former and life-long friends, and society in general. His course is a mistake. Few physicians ought to practice medicine after fifty years of age. Their practice ought to be sufficiently remunerated, that they will be able to retire at, or soon after that age, on a suitable competence. The

doctor must be thoughtful and attentive, solicitous for the wants and needs of his patients, and tolerant of their exactions and eccentricities. Always firm, kind and courteous, in a word, he must be a gentleman, and nothing else will fill the bill of his requirements, not in the fine clothes he wears, but in his kindly, efficient, just and sterling intercourse, day by day, with his fellow-men. Let him strive to fill Max's tribute to John Stieglitz, whom he calls the good physician. "His name, alone, gave confidence to the suffering; his presence, comfort and help. Faith and trust preceded and followed him. Kind and serious, sympathizing and inquiring, he approached the patient; with comprehensive searching, and kindly questioning, he firmly assured him. That which he prescribed was the result of the most careful thought. Where it was possible, he used the milder and simpler remedies; if not, those by which he could more decidedly attain the distinct and desired end. So he completed a busy and useful life; to the State a faithful servant; to society an ever ready helper; to his own people and friends a sure rock of defense. His memory will never fade from their hearts. And, in the spot where he so successfully labored, it will be a sacred duty ever to maintain it alive, for he was very much to many, although all did not know his full worth."

A suitable recreation is not to be denied any hard-worked man, but the doctor must ever have in mind that his home, his office, or his carriage much better become him, than his frequent and conspicuous appearance on the street, at public loafing-places, bar-rooms, saloons, street-corners or racing courses. It is our advice never to employ in your families the medical man who talks loud and bets at elections, horse-races and the like. There is one thing of all others that the doctor must not be. He must not be a puffed-up bigot, feeling and manifesting, by his every act, that he and his especial sect or party are the great depositories of medical lore and medical skill, and medical wisdom; he is right, and all besides are wrong, are impostors, charlatans, quacks, pretenders, and every other bad thing his mistaken zeal can invent. This is perhaps the gravest, at the same time that it has been one of the most common mistakes a certain class of physicians have committed. It needs but a very little general and unprejudiced observation, to convince the earnest seeker after truth that there are several prominent medical sects; that they have become prominent, and secured themselves in the confidence of their numerous adherents, solely in view of their excellent qualities; that there

are gentlemen, scholars, indeed, *savans*, connected with all of them, that richly entitle them to the confidence they receive, the standing they have attained, and the respectful consideration of all. It needs but the common allowance of *sense*, a quality as indispensable to the physician as to the nurse, moreover, to teach the medical man he must be liberal and tolerant in his views and estimates of others, if he himself would achieve the highest degree of usefulness his calling will warrant.

On the subject of liberality of views and acquirements, we have expressed our sentiments elsewhere, in an address delivered last year, in the Assembly Chamber, at Albany, before our State Medical Society, from which, in conclusion, we beg leave to quote. [See Transactions Eclectic Medical Society, State of New York, for 1868–9, p. 151.]

Fredonia, 1871.

DENTAL ANÆSTHESIA.

By J. Edwin Danelson, M. D., Little Falls, N. Y.

Whether necessitated by legal enactment, or followed as a matter of choice, many dentists, in consideration of unforeseen accident, are in the habit of calling in the aid of a physician for the purpose of administering chloroform for dental purposes. The object of this communication is to describe the method as well as the necessary precautions to be taken; the manner of preventing accident and the treatment on its occurrence.

Most persons have great antipathy to, if not an innate dread of, the pain to be experienced in the removal of old and decayed teeth, fancying all manner of complications, such as long roots, spreading or bulky clustered roots, the crushing of the hollow crown, the separation of the fangs which are singly to be "dug out," and last but not least, the continued pain from the slipping forceps, or repeated extractions. The pain during the operation is the chief cause of their fears. This one element causes many to delay the matter for weeks and sometimes months. This unhappy condition of affairs prolongs the disastrous effects upon the constitution consequent upon a mouth full of broken and decayed teeth. Dr. Dio Lewis, speaking of the unhappy effects of decay and loss of teeth, says: "It gives the mouth an unseemly appearance. Be the face never so beautiful, if, when the person smile or speak, he presents a mouth of decayed and filthy teeth, the effect is not pleasant. Decayed teeth always affect more or less the breath, which is not only offensive to persons standing near, but when the sufferer sleeps with his mouth open, as many do, the impurities drawn into the lungs and blood must prove mischievous. Besides, the loss of teeth changes the voice. To all this may be added a still greater loss. *Digestion* is impaired. Few losses are more grave than that of the teeth."

By the improvements in mechanical dentistry, false teeth may be inserted in partial or complete sets after the decayed teeth are removed. For the removal of the pain caused by extraction, anæs-

thetics are demanded. Many means have been resorted to to accomplish this end. Prominent among them may be noted the local application of ether spray to freeze the gums, the galvanic current, the inhalation of nitrous oxyd, and the inhalation of chloroform. We confess to a preference for the latter.

The preliminaries to operation are these: The person is to abstain from the meal prior to the time of operation, fasting for three or four hours. About a half hour before the sitting, two or three drachms of whisky or brandy are administered. The person now takes his seat upon the chair, with the head as low as comfort and ease of manipulation will permit, the head turned to one side. All constricting bands about the neck or waist are removed or loosened, and the chest, from the neck downwards, covered with a towel.

The objects of the above precautions we will briefly state. Abstinence of food is enjoined in order that vomiting from gastric irritation may be prevented. Irritation of the pharynx, esophagus or larynx, caused by the backward flow of blood produced by the cutting or tearing of the gums, and by the laceration of the branches of the dental artery, will provoke vomiting, and hence the head is turned to one side. If hiccough happens, no delay is caused thereby. Stimulants are used to prevent the prostration and syncope sometimes following the administration of this anæsthetic. The body is placed in almost a horizontal position to bring the head low, as an additional means of preventing syncope. Pressure upon the chest is removed to facilitate respiration.

The physician has by his side a bottle of Nichols' or Squibb's chloroform, a bottle of chloroform and eau de cologne, in the proportion of three to one in the order named, a basin of water with a couple of sponges, and a cork with cord attached, which is at times necessary in order to keep the jaws separated. The jaws will occasionally be found rather firmly locked, even when the patient is deeply impressed by the anæsthetic. This is, of course, introduced before administering the chloroform. Lastly, the physician is provided with a piece of folded linen (towel or handkerchief), laid upon a piece of sheet rubber to protect the hands.

The chloroform and Cologne mixture poured upon the linen is the first administered, and is held about an inch from the mouth and nostrils, allowing of the free admixture of atmospheric air. This mixture is pleasant to the smell and produces anæsthesia with semi-consciousness, being admirably adapted to cases where only a few

roots are to be extracted, or cases where there are heart or lung diseases. When these last mentioned complications occur, I administer this compound exclusively. In other cases, where the constitution is sound and there are many roots to be extracted, I moisten the linen after the first wetting with the pure chloroform, causing complete anæsthesia, if such is deemed advisable. The dentist can now proceed without haste, the linen being removed during his manipulation.

In following out the above directions there is the least possible chance of accident happening, and thus far none have happened to me, whether the chloroform was administered for dental purposes or otherwise. I have given it to persons of either sex, to both the old and the young; to the feeble and to the stout and vigorous, to all indiscriminately.

I might mention other uses of the chloroform and cologne mixture if I was not confined to the subject stated at the head of this paper.

The treatment of syncope and other accidents from chloroform, in this particular sphere of its use, would of course be the same as in its use for other purposes.

INFANTILE CONVULSIONS.

READ BEFORE THE BROOKLYN ACADEMY OF ECLECTIC MEDICINE.

BY J. EDWIN DANELSON, M. D., LITTLE FALLS, N. Y.

In presenting a subject so general, I propose to treat it only in a general manner. To elucidate the many diseases in which convulsions are a prominent feature, or a concomitant incident, would be to write a volume on the diseases of children.

The casual observer cannot but be struck with the fact of the prevalence of spasms; clonic or otherwise, in the age of infancy. Whether this epidemy (if I may be allowed to use the expression) is due to the impressibility of the nervous system, during the earlier years of its growth, or to the condition that the majority of mankind are children, and, hence, the greater proportion of diseases is found to be with the greater portion of human beings, with those who are under seven years of age, I will not attempt to decide. If we admit, on the one hand, the acute sensibility of infancy, and uphold the theory of its lack of tone, its extreme excitability, then we must, on the other hand, declare as exceptionable those remarkable cases of tenacity to life, seen frequently in the child when suffering greatly under the most aggravating circumstances, or when enduring the prostration of lingering disease.

Convulsions are *clonic*, *i. e.*, having intermissions or periods of relaxations, or *tonic*, *i. e.*, where rigidity is continuous. Youth is subject alike to the one and the other.

The investigation of the causes of convulsions in children is of the highest importance, as only from a correct knowledge of this matter (as in fact in all diseases) can we arrive at a correct diagnosis.

The intensified susceptibility of the nervous system at this period of life, I do not deny. That little being, whose sky is the ceiling, who knows no other ground than the floor of its nursery, and knows no other world than that hemmed in by its walls, on either side, who

extends unsuccessfully its unguided and inexperienced hand to grasp the toy that pleases its sight, who recognizes so cutely the step of its parent, and sinks so quietly to rest at the sound of the familiar lullaby of its mother, in whom the prick of a pin opens the flood-gate of tears, who starts so suddenly with every loud noise, must, judging by analogy, be shocked and overwhelmed by lesser causes than those which compel the man in his prime to yield.

It is granted that whatever tends to lower the tone of the nervous system, is a predisposing cause to convulsions. Anæmia, in this relation, takes the lead. Some are born with a spark of vitality so dim that they may be said to possess a convulsive diathesis. Miasma is a prolific cause of convulsions. Many of the more virulent forms of exanthemata are ushered in in this manner, or are accompanied with spasms on the repulsion of the rash. Acute enteritis, whether from irritating ingesta or verminous irritation, is another cause. Convulsions are sometimes caused by fright, sometimes by local irritation, as in one instance, where convulsions followed the use of a swab in diphtheria, and in another, from urine passing along the inflamed uterus or urethra; from spinal irritation and cerebral congestion. External injuries will also give rise to convulsions in children.

Diagnosis.—If a child is anæmic, emaciated, starts with every sound, and exhibits continual restlessness, there is a loss of tone of the nervous system, and you may look for an occasional repetition of the paroxysm, until the power and energy of this system is renewed. The presence of worms is easily detected in most cases. If it is the ascaris lumbricoides, we find the bowels tympanitic, loss of appetite, continual thirst, lips alternating, pale and purple, the upper lip and nostrils considerably scarred from scratching, grating the teeth, and sudden starting during sleep, with sometimes a dry, husky cough. If it be the ascaris vermicularis, there is a constant itching at the anus, worrying and restlessness, even to a similation of chorea Sancti Viti. This species of worm will be detected in the alvine evacuations. If the convulsions arise from enteritis, the spasms are clonic and sudden, and the body cramps forward, the knees and chin approaching each other. In spinal irritation and disease of the uterus, the spasms are oposthotonos. In cerebral congestion, there is feverish symptoms, high pulse, flushed face, the child is frequently moving the hands toward the head, and rolling the head upon the pillow. The irritation, during dentition, has similar symptoms. Here, however, you find the gums swollen and the mouth dry and hot, the child spas-

modically bites the nipple. The approach of fever has each its characteristic symptoms. It may be suspected during the prevalence of fevers in the neighborhood. Blows and other external injuries will, in most cases, show marks and contusions upon the surface.

Convulsions not being idiopathic, no fundamental or exact law for forming an opinion in regard to prognosis can be given. Much will depend upon the intensity of the cause, and the probable success of the physician in removing it. It will be borne in mind that, at times, hereditary influence is transmitted to the child, which the best of skill will hardly be able to overcome. Two instances of this character recently came under my notice, one in which the mother had been, and was still suffering from repeated attacks of epilepsy; another, in which the mother, during utero-gestation, cared for a brother, subject to convulsions. In this latter case, the child was almost daily attacked with spasms from birth, and died, during a convulsion so persistent, that chloroform seemed to be of little avail.

"Sudden convulsive seizures, such as happen without premonitions, are to be regarded as more dangerous than those of a contrary character. When the paroxysm is attended by paralysis or squinting, the existence of several mental lesions may be suspected; but convulsions, however occasioned, should so far be regarded with apprehension as to command the most prompt and vigorous attention." (*Diseases of Children*, R. S. Newton. *Op. sit.*)

If I may be allowed, I would divide the treatment of convulsions into two classes: First, the *immediate* treatment; second, the *continued* treatment. The immediate is applicable during the paroxysm and will meet a large majority of cases. It consists of relaxants and anti-spasmodics. Foremost among these I place chloroform and lobelia. Counter-irritants answer a good purpose; as mustard paste to the feet, spirits of ammonia to the spine, or enema of mustard and lobelia. In most cases chloroform by inhalation will be the most speedy and efficient agent, or it may be administered in small doses internally. Gelseminum does well under certain circumstances. Having the system under control, I would then adopt a so-called *continued* treatment. This will, of course, vary in most cases, and has especial bearing upon the morbific cause. If this is ascarides lumbricoides, destroy and expel them with santonine and compound powder of jalap. If anal worms, use an occasional cathartic, tri-horal injections of salt-water or tincture ferri chloridi and water, and smear the lips of the anus with lard. This application prevents the accumulation of ova,

and hence interferes with the propagation of the worm. Treat fevers with diaphoretics, arterial sedatives, tonics and anti-periodics. Anæmia must be met with strong tonics and a persistent effort to establish healthy secretion and excretion. Hygienic agencies must not be lost sight of. I hold of the highest importance the use of pepsin in anæmia in children. Treat epilepsy with tonics and bromide salts. If the convulsive action arises from the irritation of dentition, lance the gums and administer gelseminum. If from some inflammatory condition of the urinary organs, my favorite plan is to use cathartics, causing copious watery stools, thereby relieving in a measure those organs, and using freely a tea of hydrangea and marsh mallows. Contusions and surgical injuries must receive treatment according to the nature and extent of the injury. Irritating ingesta may be removed by emetics, or catharties, or by both.

There are cases in which the methods I have suggested as continued treatment would be productive of immediate relief. For instance, the emetic in overloaded stomach, or the cathartic or enema in constipation. Lancing the gums during dentition is sometimes very prompt in its good effects.

Again, these means cannot be used indiscriminately. It would be foolish, if not false, to use an emetic in congestion of the brain, or a cathartic in violent enteritis. It would be useless to treat an irritation of the bladder with diuretics and cathartics, when really the exciting cause is vermin in the rectum. This occasionally happens in the male child.

In all cases be prepared with *immediate* medication with the compound tincture lobelia and capsicum, with chloroform for inhalation, or with chloroform and lavender combined for internal use. Then will the terror of these maladies be removed.

Chloroform will often answer a double purpose. It will not only relieve the spasm and pain, but will allow renal calculi to pass, will empty the bladder involuntarily, or admit of the free use of the catheter. It will relieve the spasm and pain of the bowels and allow fæces to pass an inflamed portion. With the exercise of a little precaution, you have in this an agent potent and almost harmless, for but little danger is connected with its careful use. For children, I use it for inhalation in the proportion of two parts of chloroform to one part of eau de cologne; for internal use, one part of chloroform to seven parts of compound tincture lavendulæ. Dose, one-half to one teaspoonful in water.

SCROFULA, AND ITS RELATIONS TO MENTAL INFIRMITY.

REPORTED PURSUANT TO RESOLUTION ADOPTED BY THE ECLECTIC MEDICAL SOCIETY OF THE STATE OF NEW YORK, AT ITS ANNUAL MEETING IN 1870.

BY ALEXANDER WILDER, M. D.

It is no easy matter to define the ancestry of scrofula. Indeed, the term has been considered as serving rather to disguise the ignorance of physicians, than as representing any well-understood type or idea of disease. When we assign to any phenomena a name, there are many who will imagine that we understand the whole matter, thus giving us credit for superior knowledge upon a subject, upon which, perhaps, our ignorance is pitiable, and, it may be, almost driveling. Indeed, we have long since learned to regard with suspicion, any man assuming scientific attainments, who employed an exuberance of technical language, and multiplied new-coined and far-fetched terms. A man of general knowledge generally has at his command words enough of his own language, intelligible to his auditors.

Some forty years ago, when the meteoric showers were first observed in this country, one of the "plain people," who was viewing the luminous display with terror, inquired of a scientific acquaintance, standing near him: "Sir, what is this? is the world going to burn up?" "No," replied the savant, "but it is a remarkable phenomena." "Is that all? Well, I don't mind anything about it, since you know what it is."

When we use technical terms in pathology that are not definite, or closely significant, our meaning is vague, because our ideas are uncertain or confused. The poet, Tegner, chants in his "Northern Saga:"

> "Thou knowest not what thou can'st not clearly say;
> Man's lips give birth to words and thoughts together—
> The obscurely uttered is the obscurely thought."

The word scrofula has thus been for centuries the representative of an indefinite idea. Certain morbid manifestations were denominated scrofulous, a regimen prescribed, which was more or less beneficial, and thus the matter usually ended. Peculiar swellings, ulcerations, and tuberculization, were assigned to the presence of the peculiar morbific agent, and means were employed in treatment which were not usual in practice. Mysterious results were noted, which sometimes followed, from the laying on of the hands of persons supposed to be miraculously gifted; and, in England, the extraordinary piety and sanctity of Edward, the confessor, one of the last of the Saxon kings, occasioned the dissemination of the belief that he could heal the malady so prevalent and unmanageable. Hence, he used to touch the scrofulous tumefactions, and, it is said, they would take on healing action immediately. Afterward, this power was supposed to be a kingly endowment, divinely imparted by the consecration, and the malady became known as the "King's Evil." It is worthy of mention, that gipsy queens also displayed like capacity to remove peculiar swellings, by applying their hands, but it was regarded as vulgar and superstitious to expect relief from so vile a source.

It was remarked that the Hebrew and Arab peoples were exempt from the scourge, and accordingly the hypothesis was propounded that it was a morbid condition, derived from dietetic causes. The swine, so odious to Semitic and Celtic races, and a favorite among Greek, Roman and Teutonic epicures, was speedily arraigned as the source of the malady. The name *scrofula* was devised for it to indicate its origin from pork. We are about as hostile to the use of this article as ever were Israelites or Gaels, and would gladly render the herds of swine over to the uses said to have been assigned to them by Jesus Christ; but with all the measles, scrofula, trichinæ, and other evils imputed to them, there can be nothing gained to science, or in good sense, by asserting such things as facts except they are well substantiated. In these days prejudice must succumb to knowledge. We know that the Teutonic and Anglian nations are badly infested with scrofula; so too are the Irish and the negro population of the United States. But it is probable, though we are lamentably deficient in statistics and observations, that the population of more southern climates are comparatively exempt. Yet, Captain James Riley, who was shipwrecked off Cape Bojador, and spent several months in slavery to Arab masters in the desert of Sahara and Western Morocco, remarked the presence of swellings and other strumous

indications among the inhabitants of the towns. One of his sailors, James Clark, suffered from eczema of the head, and was attacked by king's evil after returning to the United States. The diseases of Egypt, many of them, would seem to indicate the presence of a strumous diathesis.

The disease has long challenged the science as well as the art of the physician; its origin, development and eradication have alike taxed our knowledge and professional skill. Observation has been repeatedly at fault; for the facts which were noted did not apply uniformly to the different races and regions of the earth. The phenomena were frequently of occult origin and could not be confidently cited in testimony. Men of extensive learning have differed widely as to the nature and peculiarities of the disease, and thus confused the understanding of the subject.

It is of doubtful utility to compare the various opinions, and indeed what is known consists principally of symptoms, developments and other phenomena, throwing little light upon the cause or the methods of eradication. It has been propounded by Samuel H. Dickson and other pathologists of merit, that scrofulosis is essentially a distinct malady from tuberculosis. Phthisis, or tubercular consumption, is said to be not more frequent among sufferers from scrofula than among other persons. We all know that consumption is the great destroyer of life in northern Europe, Great Britain and America; but the deaths attributable to scrofula, as distinct from tuberculosis, are more rare. There often appears to be an infecting principle about tubercular disease, like that of glanders in horses, which is essentially unlike the agencies which seem to be the propagators or developers of scrofula. The latter affection often assumes a variety of forms in the same person. We have witnessed it in turn developed as ozœna, erysipelas, neuralgia, influenza, and cutaneous eruption.

It has been observed that every agency which tends to diminish the vitality of the blood, appears to engender scrofula. Privation of sunlight and imperfect nutrition take the lead. Small-pox, measles and scarlatina, are great developers of the scrofulous diathesis; and many suppose, therefore, that vaccination has already made scrofula a less prevalent malady. This I doubt. Vaccination is itself the transmission of a noxious element into the physical system, producing a morbid condition, injuriously affecting the vitality, and therefore, possibly, an inciter of scrofula. Indeed, it is now the favorite doc-

trine, that whatever tends to impoverish the blood, is the promoter of scrofula. The manufacturing population of Great Britain are generally sufferers, and Doctor Good assures us that there is no difficulty in explaining the existence of scrofula under their conditions; they are not sufficiently well fed, they are not well sheltered, they are not comfortably clothed, and they are set at labor too early.

Many have supposed that the eruptions and boils produced in the water cure crisis were rather the manifestation of a morbid condition induced by the peculiar treatment and regimen, than the bringing to the surface of any specific *materies morbi*. If the patients had been fed with different food, affording more stimulus and real sustenance, perhaps the boils would have never appeared. Such is the case elsewhere. It is generally known that a free use of bicarbonate of soda, which is an aid to the plastic action of the system, will often obviate the tendency to develop these pests.

Young says that the whole of Great Britain is scrofulous, and attributes the fact to the climate; but Dr. Dickson is of opinion that there is something in race likewise. The Chinese, he remarks, suffer as much from ochlesis; and in many parts of that country, as much from imperfect nutrition as the English, but we do not hear of scrofula as prominent among them. The blacks in Africa suffer variously and capriciously; sometimes from famine to a great extent, but do not have scrofula, although the same races in this country do. In Hindostan, the native population suffer under all the circumstances, except climate, which in Great Britain produce universal scrofula, yet they are not so subject to it. In this country we do not suffer from ochlesis, except in the cities; we do not suffer from want of clothing, food, or shelter; our children are not overworked in manufactories; our laborers live well, and are every way in a better physical condition than the laborers of Great Britain, and yet scrofula is extensively met with among us. Dr. Dickson asserts that it is diminishing, however; and that it goes on diminishing on account of the increased comforts, the better hygienic conditions which science, in the service of health, is providing every day; still, there is scrofula among us in great abundance, and we apprehend that any apparent amelioration is a concealment rather than eradication.

Dr. W. Byrd Powell, somewhat dogmatically professed to have made the discovery, that scrofula was the product of intermarriage between persons of unsuitable temperaments, and constructed a table

by which he insisted that the origin of scrofula, *de novo*, was fully explained. "The time has arrived," he declared, "when physicians must cease to attribute all scrofulous forms of disease to ancestral inheritance, because, not less, I think, than ninety-five per cent of such forms of disease, are now attributable to physiologically incompatible marriage." He propounded that the two temperaments, sanguine and bilious, were *vital*, while the lymphatic and encephalic were *adjunctive*. Alliances, between persons of like temperaments, he declared to be incestuous, and only two or three forms of the "mixed temperaments" could be relied upon as likely to produce a normal offspring. Yet, in the face of his assertion, the peoples displaying the greatest vitality, have been addicted for centuries and chiliads of years to marriage alliances of the very kinds denounced. Emphatically is this true of the Jews and Arabs, the Hindoos and Chinese, the Tartar tribes, the Slave, Teutonic and Celtic nations of Europe. Indeed, no people or community, however pure their temperament, could exist more than two or three generations, before there would inevitably arise such a mixing of the temperaments, and with it scrofula and other disease, that every person would be rendered, according to his theory, physiologically incompatible for any conjugal alliance whatsoever, and incapable of continuing the human species. Further argument is unnecessary.

But hybridity seems to be the fearful developer of scrofula. Knox attributes to it, the prevalence of this disease in the United States. He evidently imagines that because political equality exists here, between people of diverse origins, there has also been an equally extensive intermarriage. But this notion, so prevalent in England, is not warranted by facts. We are no more scrofulous nor mongrel than the inhabitants of Great Britain, and they, with their Belgæ, Cymræg, Angles, Jutes and Saxons, for ancestors, have no occasion to taunt us with mongrelism. There has existed among our people a general repugnance to mixed marriages, whatever their idea may have been upon the subject. We believe, however, most religiously, that deterioration has followed the mixture of races. The Scotch, healthy and hardy, mix readily with the Indian on our frontiers, but it is an absolute fact, that their offspring are scrofulous and consumptive. Osceola died of consumption. He was the son of a healthy Indian woman, and a Scotch father. The mulatto is always liable to scrofula, and can never keep up his number. The Portugese have mixed with the Malay, the Indian and the Negro, producing a most

miserable race, wretchedly degenerate in every way, and liable to scrofula.

It has been stated by a recent writer that there are thirty-nine families in Europe out of which kings are selected; of these, a large majority are affirmed to be positively scrofulous. They live generally according to hygienic rules, and are bred with great care, yet they are scrofulous. We must go far back to the original stock whence they derive this condition. The ruling house in Austria is famous for its thick lip; and a thick lip is a characteristic mark of scrofula. The British royal family are notoriously scrofulous. We owe the vicious and unwholesome fashion of high stocks to a Duke of York, who invented it to hide the glands of his neck and the results of ulceration. There has been nothing in the habits of these two families which produces scrofula, in several generations, as the matter is generally understood. It is asserted that but a single healthy family exists on a European throne, the house of Hohenzollern.

Thus the crowned heads and the artisans in the manufactories meet on an arena common alike to both.

Something must be owing to climate; and the colder countries are more subject to scrofula than warmer ones. It may be that something is also attributable to temperament and individual constitution. The idea has become prevalent that scrofula especially attaches itself to the light-haired, the blue-eyed, the blonde complexion, all of them German characteristics. It has also been charged upon the intermarriage of kindred; but the Jews have married near relations for centuries, so have the Arabs, the Basques and Britons, and numerous other peoples; and there is no special degeneracy, scrofula, idiocy, or other evidence of deterioration among them.

It is evident that the strumous constitution is in some way an inheritance. While discarding as untenable the proposition of Dr. Powell, we acknowledge that children, often without apparent cause, are scrofulous, whose parents exhibit no such indications. But we may consider ourselves reasonably sure that idiosyncrasies of families are often concealed for generations, which appear again in remoter posterity. The peculiar tastes, habits, proclivities of children which appear eccentric and to differ from those of their kindred, may generally be traced, with little difficulty, to ancestors several degrees removed. Why may not a tendency to peculiar forms of disease also be transmitted? At least such is our conviction. The latent prin-

ciple of scrofula has been conveyed from one generation to another, till eventually, by such abnormal practices as the occupying of apartments from which sunlight was excluded, deprivation of wholesome food, insufficient warmth, it became aroused into activity. This hypothesis is rendered plausible from the fact that the glandular system generally is first to exhibit the morbid condition, showing that there is a deficiency in nutrition. The bones soften and the nervous system is invaded. We generally attribute the morbid manifestation to the proximate cause; whereas, but for the inherited tendency, that cause would have been innocuous.

It has often been conjectured that scrofula was the sequence of a taint of syphilis. A few centuries ago the latter disease is said to have been prevalent in Europe, and to have been regarded as an epidemic. This would, so far as it goes, give plausibility to the hypothesis. It would afford explanation for the prevalence of the strumous diathesis in the royal and noble houses; although we are unable to perceive why the now imperial house of Hohenzollern shall be an exception. It is certain, however, that persons of weak and disordered minds are numerous in these families; insanity appearing within a century in the houses of Bourbon, Brunswick, Vasa, Denmark, Russia, and other families; although it must be borne in mind also, that among the most intellectual men of the world have been and are those affected with some forms of struma.

There is little difficulty for an experienced observer to trace out the operation of this morbific principle. We have seen it take the form of a cold, and pass into influenza, bronchitis or rheumatism. Painful neuralgias have ensued, troublesome catarrhs, enlarged tonsils, diarrhœa, phlegmonous swellings and cutaneous eruptions. Indeed, herpes, salt rheum, and eczema, are often forms which it assumes to the great relief of other parts of the organism. But the variety of phases which scrofula displays is almost incredible. Being emphatically the disease of innutrition, it assails especially the glands and follicles of the body. The liver and kidneys, the stomach and intestines, the bronchi and tonsils, the armpits and bones, the nares and lachrymal glands are all liable especially to assault. Goitres, white swellings, medullary cancer, axillary abscess, schneiderian catarrh and bronchitis, are all scrofulous affections. Hence, when we learn how to treat scrofula, we have them all under control; till that time we shall find them obstinate.

We repeat that the scrofulous diathesis is the evident product of insufficiency of nutriment. Poor feeding weakens the intellect, and

even produces insanity. This was abundantly demonstrated at the prison of Andersonville, in the civil war. The same cause is attributed by Doctor Seguin to idiocy. He defines it to be "a specific infirmity of the cranio-spinal axis, produced by deficiency of nutriment in utero, and in neo-nati." The mother may have been underfed in puberty herself, or through previous generations; or miserably enervated by various causes, or may have been fed, during gestation, with innutritious substances, or suffered from impressions, depressions, shocks, privations, exertions, abuses, excesses, altering the nutrition of the unborn or new-born child. All these agencies are also productive of struma.

The relation of scrofula to mental infirmities has not been sufficiently investigated. Yet enough is known to show that it is intimate, even modifying, and, perhaps, obviating, in a great degree, moral accountability. Observation has demonstrated, that idiots were generally of a strumous diathesis, and nobody will pretend that they are to be punished for crime, like persons normally developed. I regret that I have not statistics at hand to illustrate what I am propounding. Immediately after being designated, in 1870, to prepare a report upon this subject, I obtained promises from the principals of several institutions for the blind, deaf-mutes, idiots and others, to furnish documents to show the prevalency of scrofula among the inmates. Several of these promises were repeated. Not one of them was redeemed. I was verbally assured, however, that a large proportion of the blind, deaf and dumb, and idiotic, were sufferers from scrofulous disease; but, of such statements, I can make no special account. I am also aware that many persons, perhaps a majority, who are addicted to drunkenness and masturbation, or to other habits of analogous character, are of the strumous diathesis; and, hence, probably, from an impulse, to them a natural one, their proclivity to their peculiar vice is almost irresistible. Persons in health, and having their faculties normal, are seldom or never mastered by any habit, vice or impulse to crime; whereas, a large number of the criminal population are scrofulous, and more or less mal-developed or imbecile. But with our civilization still deeply saturated with the ideas of barbarism and the dark ages, and our sciences still in a great degree empirical, it is not easy to write intelligently, or to receive just appreciation for whatever conviction may be expressed on the subject. I will, therefore, say no more upon this matter at this time.

While, therefore, with the imperfections of our data and of our observations, we are not able to speak as decidedly as we could wish,

it must, we think, be acknowledged that scrofula generally exists with congenital disorder of the mind, giving color to the proposition that it is itself the cause. But its own history is so obscure, that much investigation will be required to demonstrate the matter beyond dispute. The pathological agents producing the abnormal conditions may be physical; children engendered under unfavorable conditions are often diseased, erratic, idiotic, or vicious.

So far as personal observation goes, we have witnessed enough to give apparent sanction to the ideas here propounded. Wherever we have known a case of idiocy, it has had struma for its companion. We have been led to believe that a more extended investigation would be attended with like conclusions, and so believing, we are impelled to the conviction that the pathology of scrofula, and the *rationale* of its operations, ought to be more carefully studied. If the internal order of dwelling-houses should be reformed; if there was more living in the sunlight and open air, a general disuse of alcoholic liquors, greater cleanliness of person, and more universal purity of morals, this scourge of our race and civilization would disappear. But till attention is directed to this subject, we must expect an increase of deformed and idiotic persons, as well as of the insane and drunken; invasion of pestilence and mysterious disease, and a catalogue of ills, moral and social as well as physical and intellectual, which will, at stated periods and cycles, threaten to destroy our population and to pervert our customs and institutions.

We associate in these our concluding remarks, goodness with health, and vice with disease, because it is our conviction that, in true ethics, such is their relationship. Carlyle was not wrong when he treated of the profession of the human healer as "being radically a sacred one, and connected with the higher priesthood, or rather being itself the outcome and acme of all priesthoods and divinest conquests of intellect here below." In relation to few matters is this alliance of sacred functions more required than in the pathological history of a malady, insidious in its operations, mysterious in its nature, impairing the moral and intellectual constitution, and owing its perpetuation principally to the law of hereditary descent—"visiting the iniquities of the fathers upon the children to the third and fourth generations," in this case outlasting the centuries, hidden for ages and generations, and then made manifest as a new outbreaking.

What has been here told imperfectly and incoherently, let them who understand, now declare.

LYMAN STANTON, M. D.

"This day a great man has fallen."

The death of Doctor Lyman Stanton was duly announced in a postscript to the transactions of the last year, but there was neither time nor space for an elaborate memorial to this pioneer of medical reform. He had been so long in the front rank, that no one had contemplated the time when he would cease to occupy the place, and now that he has fallen in harness, it is not yet ascertained upon whom his mantle has fallen. Perhaps, in due time, he will manifest himself, for his services are required. Meanwhile, we will pause to do honor to the memory of the dead.

Doctor Stanton was born in Russia, Herkimer county, N. Y., July 21, 1814. In early childhood he manifested unusual mental acuteness and capacity. When about seventeen years old, he became a great sufferer by reason of a "fever sore" on one of his limbs. After a long term of suffering, during which, the treatment he received from physicians of the "Old School," only rendered his malady worse, he went to Schoharie county to seek medical aid, under the treatment of Dr. Hare, a reformed physician. He soon was restored as far as was practicable, but was always lame. In his own expressive language, "he was raised from a bed of sickness and languishing, a wreck, the victim of a 'regular' physician. He was cured by a 'root doctor.' Immediately, in the year 1835, he engaged in an uncompromising warfare against the use of deadly poisons as medicines." It was here he commenced to study medicine. He received instruction from the man who had in his case *proved* the correctness of his theory, by a successful practice. Part of his time was spent in teaching school, at the residence of Dr. Hare, where a number of the neighbor's children were also admitted. He formed the acquaintance of a large circle of friends, who all esteemed him as a young man of great promise. His stern, moral and exemplary life rendered him a general favorite. At the end of one year he returned to his home in Russia, where he was received with glad welcome by friends and acquaintances. After a short rest, he renewed his medical studies

L. Stanton, M.D.

with Dr. Wooster, of Middleville, in the same county. He began his practice in Russia, among those who knew him well from his childhood, and soon distinguished himself as a competent, skillful physician. In the fall of 1836, he was married to Miss Jemima Topping, of Sloansville, Herkimer county. In the spring of 1837, he moved to Rutland, Jefferson county. Here his skill soon became known, and his reputation was established. He remained at Rutland until the fall of 1842, when he removed to Copenhagen, and formed a copartnership with Dr. Allen, which continued five years. In July, 1844, his wife died, leaving two children, a son and a daughter. In 1845, he married Miss Emily Cottrell, who survives him. As a neighbor, a parent and a husband, he was a man of rare fidelity.

He recognized his obligation to his profession, by promoting the organization of reformed physicians into societies, for the purpose of mutual improvement. The Reformed Medical Society of Jefferson county was established through his influence about eighteen years ago, and he was its first president. He was a leading member of the New York State Association of Reformed Physicians, and was its president in 1863, when it issued the call for that State convention, which organized the present Eclectic Medical Society of the State of New York. He was also the first president of the Eclectic Medical Society of the Eighteenth Senatorial District, organized at Watertown, N. Y., January 11th, 1866, and held that office at the time of his death. He continued also an active and honored member of the New York State Eclectic Medical Society, and was looked up to as one of its strong men. He was one of the truest and most esteemed members of the latter organization. He was a medical reformer in its genuine sense; a vigorous opposer of the use of noxious minerals as medicines, and an earnest defender of safe medication. The stringent provisions in the platform and declaration of the Eclectic State Medical Society were due, in a great degree, to his agency and influence; and he was not the man to abate a line where principle was involved. He was very indignant whenever professed reformers endeavored to remove the landmarks in this matter of noxious medical agents. But for his unexpected death, he would have now been the president of the State organization.

His warfare against the abuses of the old practice was uncompromising. The laws of the State made it a penal offense, punishable by fine and imprisonment, for a person without a diploma or license from a "regular" medical college or society, to practice medicine or pre-

scribe for the sick, or to receive pay for services actually rendered. Such legislation was barbarous as any ever had in the dark ages, and was unconstitutional besides; but "regular physicians" often seem to have little regard for such trifles.

Dr. Stanton went from place to place, with petitions, asking for the repeal of the unjust laws. From 1828 to 1833, no less than 100,000 persons had signed them. The Legislature heard them, but only to abolish the penalty. After this period the number rapidly increased; and, in 1844, Dr. Mattock, of Troy, unrolled in the Assembly Chamber, at Albany, a petition of one hundred and fifty feet in length. It was enough. The voice of the people was heeded, and the obnoxious laws repealed. Few men that were in the movement had been so active as Dr. Stanton. He was an organizer and always leading the advance.

Dr. Stanton was well known as an *exceedingly* successful physician. His practice was extensive. He was often called for advice to adjacent counties, and far from home. He was almost continually busy in professional duty. He did not scorn the poor and the needy. Much of his time was spent at the bedside of those from whom he expected no pay.

He was an exemplary citizen and a zealous advocate of every measure of medical reform. He was an ardent friend of temperance, being an active member of the Lodge of Good Templars, at Copenhagen. He was a tender parent, an affectionate husband, and a warm friend.

His malady was congestion of the lungs and heart, and from the first, the attack was exceedingly severe. Everything that could be done in treatment and care could not arrest its progress. Dr. Allen, of Copenhagen, and Dr. Hale, of Adams, exhausted their skill and devotion, but he continued to sink; and, on Thanksgiving day, November 24th, between the hours of twelve and one o'clock in the afternoon, he expired.

His brother, Rev. F. H. Stanton, of the M. E. Church, was with him constantly during the last three days of his earthly pilgrimage, and by prayer, singing and religious conversation, served to cheer his dying hours with spiritual consolation.

His funeral took place at the Congregational Church, and was largely attended. Rev. E. W. Jones, of the M. E. Church, preached from John 13, 7: "What I do, thou knowest not now, but thou shalt know hereafter." He was assisted by Rev. Messrs. McMaster and Brown.

Dr. Stanton has left a wife, two sons (George and Sanford) and one daughter (Mrs. C. A. Chickering), to mourn his loss. Dr. Stanton was respected and beloved wherever he was known.

At a regular meeting of the Copenhagen Lodge, I. O. of G. T., the following preamble and resolutions were adopted:

"Again death has entered our ranks, and one of our most faithful and efficient members has fallen. Dr. Stanton, to whose calm, dignified and timely remarks we so often listened in this lodge, has left the shores of mortality, and has entered into the spirit-land. With humble and calm submission we bow before the stern decree, and say "Thy will be done." As an expression of our regard for the departed, and our sympathy for the bereaved family, we present the following:

"*Resolved*, That the memory of Brother Stanton will long remain fresh and fragrant among the members of Copenhagen Lodge of Good Templars.

"*Resolved*, That his presence, his counsel, his wisdom and zeal, as connected with this lodge, have been and are worthy the imitation of all Good Templars.

"*Resolved*, That as an expression of regard for our departed brother, the lodge be draped in mourning for thirty days.

"*Resolved*, That the secretary be requested to present a copy of this report to the family of the deceased, and also furnish a copy for publication to the *Journal* and *Republican* of Lowville, and *Reformer* of Watertown."

E. W. JONES,
LYDIA L. JONES,
EMELIE L. KNOWLES,
Committee.

At the annual meeting of the Eclectic Medical Society of the State of New York, January 25th, 1871, the president, Dr. Alexander Wilder, announced the melancholy intelligence, and paid the following tribute to his memory:

"It now devolves upon me to inform you officially of the death of one of our number, Doctor Lyman Stanton, of Copenhagen, Lewis county. He has always taken rank with the pioneers of medical reform. He began his career without the advantages of scientific instruction, but educated himself with a thoroughness that challenges emulation. For thirty years he was the uncompromising champion of the new school of medicine. His natural powers were superior, and he added to them an unswerving devotion to principle. His name was appended to the call of the convention at which the Eclectic Medical Society of the State of New York was organized, in 1863, and he continued, for the remainder of his life, one of its most earnest and efficient members.

"In the region of the State in which he lived, Doctor Stanton was regarded as among the best citizens. In public enterprises he was foremost and always influential. The religious denomination to which he belonged considered him as one of the ablest and most conscientious of men. He always labored to be of service to others. He richly deserved the high reputation which he possessed, and his memory is fragrant with the aura of good works."

CHARLES T. HART, M. D.

Professor Charles T. Hart was born at Sunbury, Georgia, August 1st, 1835. His family was of the highest respectability. His father was much in public life, and served four years in the Senate of the State. His mother belonged to the Stephens family, of later years somewhat distinguished in southern history.

Young Hart was carefully educated. He had, however, a strong inclination for a seafaring life; but, following the example of General Washington, he relinquished all purpose in that direction in deference to the wishes of his parents, and became a student in the University of Georgia. He graduated with honor. He selected the profession of medicine, and, in 1857, entered as a student at the Eclectic Medical Institute of Cincinnati. On the completion of his course, he was selected to deliver the valedictory address to the graduating class. He afterward removed to Missouri, and engaged in the practice of medicine. But he was speedily interrupted in this purpose by an invitation to accept the chair of Physiology and Medical Jurisprudence at the institution where he had graduated. He remained in Cincinnati till 1861, lecturing and assisting Dr. Newton as editor of the *Eclectic Medical Journal.* Being in Missouri when the rebellion broke out, he was made a surgeon in the Confederate army during the civil war, at the close of which he settled near Red river, in the State of Arkansas. He did not long remain there. His health had been undermined by exposure and privation while with the army, and the miasmatic climate increased his malady. He returned to Georgia, and, in 1867, accepted the chair of Physiology in the Eclectic Medical College of the city of New York. He retained this position till his death, in 1868, in his thirty-third year.

Dr. Hart was married in 1860, and leaves a wife and child to survive him. In his premature death, Medical Eclecticism has lost one of its most able and valuable advocates, and the college with which he was connected, one of its best instructors. He was a learned and skillful physician, adding to the knowledge possessed by the profession many important contributions, and few excelled him in teaching.

As a lecturer and writer, Prof. Hart was remarkable for thoroughness and precision of statement. His knowledge was always comprehensive and exact; his mind was peculiarly adapted for scientific inquiry and observation and the practical adaptation of fact to theory. Had he lived he would undoubtedly have occupied the highest position in the school of medicine to which he belonged, and would have made a superior reputation. He was a man above all subterfuge and incapable of playing a double part. His conscience was sensitive to a remarkable degree in all the relations of life, but especially so in his professional relations as affecting his associates and the sick. A strong practical evidence of this peculiarity was manifested in the fact that he employed his means and efforts in establishing the Empire Chemical Laboratory, for the purpose of preparing Eclectic remedies absolutely pure and in the forms the most perfect known.

WILLIAM WARRINER HADLEY, M. D.

BY ORIN DAVIS, M. D., ATTICA, N. Y.

"The relic is to the past as is the germ to the future."

At the annual meeting of the Eclectic Medical Society of the State of New York, convened at the City Hall, in Albany, January 25th, 1871, a resolution was passed that a committee be requested to furnish a sketch of the life of William W. Hadley, M. D., for the forthcoming volume of its transactions. By the solicitation of the President of that Society, I herewith furnish the following brief and imperfect notice of his life.

William Warriner Hadley was the son of John and Cynthia Hadley, and was born March 12th, 1818, in the town of Batavia, Genesee county, N. Y. Subsequently his parents removed to Bennington, Wyoming county, where they continued to reside for many years. The writer's personal acquaintance with them warrants the saying, that they were both, every way, very worthy persons, exemplary Christians, and members of the Methodist Episcopal church.

My first acquaintance with Dr. Hadley began in 1848, at which time he was a partner in the practice of medicine with J. Burt, M. D., in Rochester, N. Y.

The circumstances which led to this acquaintance were briefly these. In the summer of 1847 the first class of Eclectic medical students, in western New York, assembled for medical instruction at Fredonia. The second class was instructed at Rochester in the summer of 1848, and Dr. Hadley then attended as one of its members. The same fall and winter he attended another full course in the Eclectic Medical College at Cincinnati, Ohio, and obtained the degree of Doctor of Medicine. In 1849 another class assembled at Rochester for medical instruction, and Dr. Hadley was chosen its instructor in the department of materia medica. There were thirty students then in regular attendance. Since that time, he was associated with the writer in the early attempts to advance the educational interests of Eclectic medicine in this part of the State, in the publication of a medical journal as well as engaged in instructing classes of students.

He practiced his profession for nearly ten years in Rochester, and likewise connected with it a drug store, doing a lucrative business. In consequence of dissensions and antagonizing interests, the professors at Rochester were induced to forego their efforts to instruct there; and the attempt was made to establish a college, permanently, at Syracuse, which also failed.

In 1856 Dr. Hadley removed from Rochester to Brooklyn, E. D., where he spent the remainder of his life. He was a believer in Christianity, having professed saving faith in Christ at a camp meeting in Colden, Erie county, N. Y., in the summer of 1840, and immediately connected himself with the Methodist Episcopal church, and continued a worthy member of that denomination during the remainder of his life. In the fundamental views of that church he never wavered; and though never distinguished for religious fervor or excitement, yet his every-day consistent life showed few blemishes, and many excellencies worthy of example. He was a man of strict integrity, and he has left behind an unsullied reputation.

Much of the interest which is felt in his life arises from his relation to the cause of Eclectic medicine, and which grew out from the earlier attempts to establish schools for the instruction and education of medical students. He was chiefly distinguished for practical sense and candor. He was slow in maturing ideas and in expressing them; but when his convictions were formed, he was tenacious of them. He was a conservative element in all associations and society. He was always friendly and cordial in his intercourse, and that, united to an evenness and steadiness of natural temperament, his straightforward course secured confidence. For this reason, one could easily anticipate what his course would be in any ordinary supposable contingency that might arise, for he did not disappoint by any sudden, unexpected turn. Like most men possessing real merit, he was modest, quiet and unassuming, eminently consistent and plain, as well as practical in his every day life and associations. So, that in all these respects, he has left behind him a memory for real worth, which is priceless.

In the fall and winter of 1849–50, Professor Hadley delivered his second course of lectures on materia medica, therapeutics, and pharmacy, in the Central Medical College, at Syracuse, N. Y. At its conclusion, the class passed, unanimously, the following resolution:

Resolved, That W. W. Hadley, M. D., Professor of Materia Medica, Therapeutics and Pharmacy, in his course of lectures, has, by his

untiring labors, gentlemanly deportment and facility for instructing, proved himself eminently qualified to discharge the high and responsible duties of his station, with credit to himself and advantage to the class under his instructions; and we tender him our warmest thanks and best wishes."

That winter is still fresh in memory. If I remember aright, above ninety students matriculated, seven of whom were ladies. Dr. Hadley boarded in my family during the session, and we enjoyed many pleasing and profitable social interviews with students and professors. Many are now living in this and in other States, in the practice of their profession, who well remember that winter.

In June, 1868, I again met Prof. Hadley at Syracuse, attending the semi-annual meeting of the State Eclectic Medical Society. We were both invited to tea at Doctor Totman's, where old times were well discussed, and where we met with physicians who had been members of that class. After tea, Dr. Hadley and myself took a walk to find the house that had sheltered us, but it had been removed. Knowing that I was to address them on the morrow, he asked me to make allusion to these earlier times; and so, therefore, in the commencement of that address (Prof. Hadley occupying the chair), I commemorated the occasion in the following language:

"Mr. President, and members of this Medical Society: I frankly confess that I am exercised with pleasurable emotions in seeing before me these earlier acquaintances whom you and I both knew so well, Mr. President, just eighteen years since, while we were all tarrying for the winter in this beautiful city; we imparting and they receiving instruction. To-day we meet again as representatives of the cause which we then had espoused and upheld, mingling with the present congratulations pleasing memories of the winter of 1849 and spring of 1850. Providence has dealt kindly by us. Our veteran, Wooster Beach, M. D., has just entered his rest. Time has but slightly abated the vigor of our bodies, the ardor of our minds, though leaving some traces in our foreheads and in our locks. All hail! friends of the past and helpers in this present; glady we unite our labors with others now with us, who, by their presence and scientific investigations, will infuse newer life into our organization."

It seemed fitting, on that occasion, to turn back the attention of those then present to the history and associations of the past, but we did not dream that our worthy president was so soon to follow Wooster Beach to the shores of the great unknown future. I, indeed, noticed that when Professor Hadley addressed the society, he spoke

with unusual moderation and slowness of utterance, but not one of us suspected the premonitory symptoms of a disease that was bringing him slowly and surely within its grasp. When the society had closed its sittings, I took Professor Hadley's hand in mine for the last time. It was the terminus of twenty years of pleasant associations. Each warmly urged the other for a visit as early as possible.

Doctor Hadley was very reticent with his pen. Although nominally the editor of the *Eclectic Journal of Medicine*, at one time in Rochester, yet few of the editorials came from his hand. He was equally reluctant in bringing forth essays and addresses, or articles on subjects relating to medicine. Only a few have been thus preserved, among which may be mentioned an article on the virtues, medicinal properties and uses of *Euonymus Atropurpureus;* also, one on the Medical Education of Females, Report on Materia Medica, Selection of Remedies; also a very valuable contribution on the Treatment of Cancers. He delivered an address before the State Society, in Rochester, in 1865, also, another before the same society in Albany, the same year. He delivered the annual address before the Brooklyn Academy of Eclectic Medicine, on "The Duties of the Physician." Other contributions to Eclectic medical literature we cannot at present recollect. He was secretary of the State Society during the years 1865, '66 and '69, and was unanimously chosen its president in 1867.

Perhaps no one can say truly that he engages earnestly and heartily in any cause from motives wholly disinterested. There is self-interest in every occupation. Our very wants and needs make it so, and very properly, yet every good cause will stimulate the better faculties. So, in the cause of Medical Eclecticism and the advancing of its educational interests, Dr. Hadley evidently was more enlisted by the idea of usefulness than by hope of pecuniary emolument. I have always regarded his efforts in its behalf as really philanthropic.

I remember that when we were engaged in the college at Rochester, at a meeting of the faculty, John Rose Bush, M. D., our professor of anatomy and surgery, said: "These delicate lungs of mine will not allow me long to continue my labors with yours. I must resign my chair and you must supply my place." He was a young man of promise, an excellent teacher, and a superior operative surgeon. He was always scrupulously tidy in his personal appearance and dress, the very personification of neatness and precision. His early death

was lamented by all. There, in the early strength of manhood, with a bright intellect and cultured tastes, possessing a mind of unusual grasp, was our worthy professor of Theory and Practice of Medicine, P. C. Dolley, M. D. In his report, marked "H," in the Transactions of the National Medical Association, held at Rochester, N. Y., May 11th, 1852, he used the following prophetic language:

"I have not much to make me hope that my feeble labors will long be added to those of others who are engaged in this noble, and, if properly carried out, I may say, holy cause; for with me the sands of life seem to be fast running out; but I would that my last words even may be such as shall encourage to higher and more determined effort. That your action may contemplate all the great subjects which have a bearing upon our future good, and be directed by the genius of wisdom, and the spirit of harmony, is my earnest prayer."

Soon after he departed, leaving for us this prayer, and the encouragement of his best wishes. Afterward followed, in the same way, our venerated patriarch in medicine, and next to him our well beloved and respected Prof. Hadley. The disease which terminated his life was softening of the brain. It had progressed gradually and insidiously, and had not awakened serious apprehensions in his behalf a week before his decease. In fact, I understood that he lectured three times to the students in the college during the week preceding the Sabbath morning on which he closed his earthly pilgrimage. He died, it may be said, with his harness on; and we can truly say of him, "Well done, good and faithful servant." The sad event occurred December 19th, 1869, when he was at the age of fifty-one years, nine months and seven days.

At the meeting of the State Medical Society, June 16th, 1870, Prof. W. Allen offered the following resolutions of respect to the memory of the former President and Secretary of the Society, which were unanimously adopted:

Resolved, That the death of Dr. William W. Hadley, Professor of Materia Medica in the Eclectic Medical College of the city of New York, which occurred on the 19th of December, 1869, demands special notice from this Society on this occasion.

Resolved, That, in his decease, we deplore the loss of one of the independent and ever to be honored pioneers of Reformed Medicine in the State of New York; of a faithful, judicious and intelligent physician; of one of the founders, and ever one of the most diligent officers of this Society; of one who devoted much of his time, at great personal sacrifice, to the duties of a professor in our colleges, first at Rochester, afterward at Syracuse, and finally at New York.

Resolved, That this Society will cherish and honor his memory, not less as a physician and teacher, than as a citizen, who was ever watchful of the interests of humanity, as a husband and father, ever exemplifying how home may be made endeared; and as a man whose sincerity, and manly honor and piety, are worthy of our highest respect and most grateful remembrances.

Resolved, That these resolutions be entered upon the records of the Society, and a copy of them be sent to his family, with whom we warmly sympathize in their bereavement.

These attestations to his real worth are the best memorials we may desire to rear to perpetuate his memory, and crown most befittingly his reputation.

APPENDIX.

THE CONSTITUTION OF HUMAN NATURE.

ADDRESS DELIVERED BEFORE THE BRITISH ECLECTIC MEDICAL ASSOCIATION, AT ITS LAST ANNUAL MEETING AT LIVERPOOL, JULY 13, 1871.

By William Hitchman, M. D., LL.D.

Ladies and Gentlemen:

As this is an address to graduates, at the delivery of which the general public has been respectfully invited to be present, I claim the privilege, in the first place, to remind them, as medical brethren, that they have this day attained a position in society in which they are henceforward to be engaged, not alone as students, but as practitioners. Therefore, I hold each one personally responsible for an uninterrupted course of self-culture, and venture to assure them that the resources of art or therapeutical knowledge can neither be scientifically limited nor rendered exclusively sectarian, if they are to practice their profession with credit to themselves and advantage to the public at large. Having become Eclectic graduates, it is their high prerogative and solemn duty eclectically to utilize, throughout the kingdom, all that collective erudition which constitutes the whole liberal learning, theoretical and practical, of eclecticism in medicine.*

From the lowest plant to the proudest emperor, the best health of organic being is the most perfect manifestation of its vital power; and, consequently, with a maximum of life you infallibly secure a minimum of disease. The sole object of a true physician, or medical philosopher, is to heal the sick; not to fill his purse. In fact, if riches be your chief aim, then, in choosing Eclecticism you have chosen badly. In this respect the capacity of a fool, or the calling of a quack, will far outstrip, in certainty of realization, the most brilliant prospects of the ablest member, either of the British Association

* The great central idea of Eclecticism is the adoption of truth in therapeutics. Remedy after remedy have been taken from our Eclectic materia medica, by the *Lancet*; this conveyance alone makes them strictly orthodox; they are so immediately accepted by the Allopathists, that I venture to predict the speedy prevalence of Eclectic practice.—W. H.

for the Advancement of Science, or the German Congress of Physicians and Naturalists.

Each member of this association, in common with other medical dissenters, is bound in honor to himself, as well as in justice to truth, not to yield up his judgment to the tyrannical dictates of a bigoted clique, or the arrogant despotism of an exclusive Allopathic council, in whose election they have no voice. At the same time, he is bound to cure his patient as easily, quickly, safely, and pleasantly as perfect recovery will allow; but I protest, sir, that physical science, in the present state of our knowledge, justifies no man or set of men in tying and binding a brother on a bed of Procrustes,* no matter whether such chains be forged by the fiery Vulcan of "Allopathy," "Homœopathy," "Hydropathy," or the "Botanic Practice of Medicine!" Each graduate must religiously and wisely (*sancte et sapienter*, under all circumstances) select his treatment, not, as is too often done, at the mere caprice of a whimsical patient, but according as he knows, from the soundest teachings of actual experience and enlightened observation, that one method is incomparably better than another in the case then and there before him. Such a practitioner, and mark, such a practitioner only, is really and truly *the* Eclectic physician worthy of a people's choice.

With these preliminary remarks, I proceed at once, sir, to the consideration of the noblest study of mankind; man. You will rejoice, I think, to find that the Bible and Biology are at one on this point: "the life of the flesh is in the blood." Religion and science have thus embraced each other; the olive branch of a learned peace is yet visible in the distant horizon; the morning sun of eternal truth shall assuredly brighten our hearts and minds with the glorious effulgence of "more light," and, being light from heaven, no power of earth shall extinguish it. Living things on this planet form, as it were, one tree, with two branches; and as this tree of life is rooted in the physical basis called *protoplasm*, so does it draw its molecular sustenance from, and reconstruct itself by, continuity of forces, multiplied and co-ordinated, through the power of aggregating into "cells" in certain forms or modes, vegetables on the one hand and animals on the other. You will find this protoplasm, I say, equally visible in the object which you cannot define as either organically an animal or organically a vegetable, in the moving

* Procrustes, a famous robber of Attica, was a true prototype of the *genus* "Allopath." He tied travelers on a bed, and if their length exeeeded that of the bed, cut of part of their limbs to make their length equal to that of the bed; if shorter, he stretched them on a rack of torture.—W. H.

poison-jelly of our common nettle, and in the heart and brain, nay, *in each white globule* of the constitution of man. Moreover, just as water can be analyzed, and shown to consist of two gasses, which can be made, by electricity, again to coalesce and form water, so can this protoplasmic human matter be scientifically analyzed also, and being acted upon in certain modes and by given postulated principles, it may be converted again into protoplasm, in order that some new plant or animal may live, and move, and have its being in God. Plants elaborate this vital substance for themselves, from elements in the soil and atmosphere, under the solar influences of temperature and light. Thus provided in vegetables, vegetable-eating animals find in it what they must needs elaborate and assimilate into themselves. Finally these animals supply both to the carnivora and omnivorous man what they equally require to form their own protoplasmic blood; and this, when appropriated in the modes which the sciences of anatomy and physiology have already shown you, becomes woven by divine fiat, into those wonderful physical and mental phenomena which we describe as the correlations of consciousness and organization. In fact, throughout the whole ascent, organic nature is but a prophetic hymn, heralding the advent of an immortal soul. Cells themselves are only protoplasm, yet they all differ in faculty or function: "every seed after his kind," and why?—because "the mouth of the lord hath spoken it." For what is man?—the breath of a prince, like that of a peasant, is only "in his nostrils," and his end is dust. Nevertheless, I, for one, am convinced that I do perceive moral distinction in the constitution of human nature, as something not peculiar to, or exclusively the property of molecular generation; and therefore I believe that man has a faculty, derived from God, by which he is enabled to apprehend it—a truth as certain as the law of continuity.

Now the very recognition of this power involves the science of true anthropology, or the spiritual, mental, and physical constitution of man, in the language of Aristotle,

> *Νοῦς ὁρᾶ καὶ νοῦς ἀκούει, τἆλλα κωφὰ καὶ τυφλὰ*,—that is,
> Mind sees and mind hears—body is deaf and blind.

By true anthropology I understand not only scientific researches into the natural history of our species, but the spiritual, mental and physical constitution of man fairly represented. Humanity proper is not animal organization—it is the neshama of lives.* As ordina-

* A phrase found in the second chapter of the Book of Genesis: "And the Lord God formed man of the dust of the ground and breathed into his nostrils the breath (NSME—Masoretic, neshamah) of life, (lives) and man became a living soul."—(NPS, nephesh, soul or person.)—A. W.

rily interpreted by anthropological societies, it means only the historical study of man, mentally and physically. But surely there is no measureless distance between NeSMaH NeSM, *anima sed humana tantum*, and RUH, *spiritus revertetur ad Deum.* In modern science the history of animals is the history of man. It would, I think be an insuperably difficult task to frame a set of articles of belief, requiring a larger measure of unqualified credulity, than the scientific creed of modern anthropology, or external man. It runs thus: "Spirit is an imaginary substance created by priests. I believe in law, but no lawgiver; in the life-giving power of force and energy, intelligence from non-intelligence without conscious author, and that metaphysics and theology deserve contempt. I believe in the nebulous cohesive magnetic formation of a planet on which I dwell, and the origin of man from beast, as the most organized parasite on the face of the earth, in fact the highest mammal, whose progenitor was a hairy quadruped, furnished with a tail and pointed ears, arboreal in its habits when lord of Western Africa; the never-ending development of species in animated nature generally, first by spontaneous generation, afterward natural selection—sheer material strength, and consequent destruction of the weak, the sole guiding power, visible reality the only reality. I believe in the eternity of matter, which sets itself in motion and governs all worlds, and I look for the oldest *homo sapiens* in pliocene or miocene strata, and that his fossilized bones will be found, on examination, to be either an ape more anthropoid, or a man more pithecoid than any yet known, Neanderthal or Engis cranium notwithstanding; the sure mortality of the human soul, which is but an attribute of brain-protoplasm; and the regular order of the whole universe, from the inherent harmony of Cosmic periodicity, arising from molecular machinery; diversity of origin and diversity of kind in man; together with the evolution of all living beings, one from another, naturally. Fundamental inequality reigns, but no God apart from matter."*

Nature, in man and animals, like everything *in* us and *about* us, is a chaos, without method. The very word φυσις in Greek, is itself suggestive of progressive transition from one step to another; it necessarily implies a principle of unity with progression. The supreme light of living knowledge, as Coleridge has well remarked, is conceiv-

* "It is easier," says Bacon, "to accept the Talmud, the Koran and the Legends than to allow that the universe exists without God," and so I humbly say. It is far less credulous to believe that the Scriptures are what they profess to be, than to hold that they are other than the revelation of the Most High.—W. H.

able only *as* "*the relation of law*," absolutely perfect alone in God, who is εν τάντι and ἦρὸ τῶν ἤάντων also. Professor Huxley, like Dr. Carl Vogt, sneers at the idea of spirit, or vitality, yet is ready enough to admit the existence of a "*subtile influence*" even in the essential operations of protoplasm considered as the physical basis of life and mind in animated nature. Vital actions, however, are peculiar to living beings, and cannot be *imitated* scientifically. Yet nature in man and animals, we are everywhere assured, both at home and abroad, is "*exclusively*" compounded of the ordinary chemical and physical forces of the universe, the same in origin, progress and destiny; death itself, in point of fact, a relative, not an absolute condition. The thing men call dead is periplastic only, a few degree less alive. All the laws of our spiritual, mental, and physical nature, and the truths of the science of anthropology, must surely be in the facts or phenomena of each department respectively, before they are either discovered or conceived by the philosopher.

MENTAL VARIETIES ARE GREATER THAN THE BODILY VARIETIES OF MAN.—Yet Professor Huxley is teaching the British people, both orally and oracularly, and that, too, with an earnestness and a zeal worthy of a better cause, that a particle of jelly is capable of "guiding" physical forces into exquisite and mathematically arranged structures, *i. e.*, the highest faculties are but modifications of the lowest functions, from the oceanic hydrozoa through every classification of animal organization, from the lowest mind to the highest soul, man included, and that the doctrine in Teleology is utterly "absurd," which supposes that the organ of vision, for example, such as we find it in the human eye, or that of the anthropoid ape was created, or made for the purpose of enabling the being possessing it to *see!* Such structures exhibit nothing more than the passing outcome of natural development from the accidentally exposed "*nerve*" of some primeval creature, during countless æons of geological ages. Physicists want millions of years for the *natural* manufacture of men from animals, yet in all three of the primary groups, Mollusca, Annulosa, and Vertebrata, there are species with beautifully developed organs of vision, involving the three great questions of anthropological inquiry; viz., faith, science and philosophy—science of the natural world and its physical laws, faith in the existence of a future life for man, and the philosophy of eternal principles involved in finite and infinite being, phenomenal forms of motion and mutation, manifesting the laws and forces which originate and govern various natures

through all the mighty commonwealth of things anterior to sovereign man, even in the Silurian period; so that these splendid eyes in a vast chain of animal structure and function dispersed over the globe, must have existed *anteriorly* to the solar system, *i. e.*; without any light at all, if we are to credit this sort of scientific teaching, which rules by force of lawless law. Living things emerge from dead molecules!

The origin of protoplasm is itself *extra*-scientific in my opinion, a physical basis of life without adequate cause within the range of physical induction; certainly, whenever Britain, as the British people, gives up the truths of man's spiritual nature, the seal of its humanity will be broken, and the "mark of the beast" will be upon it both now and forever. Yes, the soul of man is the only deathless element of his nature and constitution, and will find no lasting rest in all its philosophical experiments and best scientific observations, until it returns from such *exclusive* physical researches, and learns to behold itself in God, and God in all things. The relations of man to the lower animals form the prime objects on the present occasion as *materials* of method, and the proper contemplation of those relations is the indispensable condition of discussing them methodically. The following method is, I think, the leading thought, as an act of the mind, which shall unite and make many things; *one*, man, himself, in the science of true anthropology, the key-note of the harmonies of physical science, in relation to the higher sentiments of the genus homo, no matter whether his skin be red, white, black or yellow, or his geographical distribution denominated Caucasian, Mongolian, Æthiopian, Malay, or any of its numerous sub-divisions. In the European race, however, the proportions of the body are normal and constant; in fact, I hesitate not to affirm scientifically, that the human form in all its measurements is incomparably more definite than any known production in the history of the earth.

All those departments of the science of man which deal with the *material* elements of animal organization can only be adequately investigated, or successfully prosecuted by the scientific methods belonging to the philosophy of matter. The psychological departments of organic nature or brain protoplasm can, in like manner, only be satisfactorily investigated by the method belonging to the science of mind. Equally *true* is it that the moral and religious elements which belong to man, and to man only, of all created beings known to this sphere, not only indicate by their very existence a

method of inquiry and a kind of evidence distinct altogether from those on which we base our scientific knowledge of physical and psychical phenomena in animals, but also involve in their essential character absolutely that *immediate* relation which they enjoy to the great Father of all, who in His wisdom rules all; not as the mere pantheistic spirit of the universe, but the Lord and giver of our world of humanity, who is not only the God of nature, but the moral governor of the human soul.

Man, I say, stands *alone* in the history of the earth, and animated nature, co-ordinated by specific endowments with the materiality of this planet, apart entirely from every other organic being; no vertebrate type *equals* him either morphologically or teleologically. The specific character, as well as specific structure, physiological economy, and final purpose of an animal, however much resembling man either in mind or body, external or internal conformation are, in my opinion, conditioned fundamentally in its exclusively immutable psychical principle; in short, an animal, however anthropoid, is an organism restricted to the manifestation of psychical and physical phenomena, the same in kind though differing in degree, from generation to generation; there is no true mental progression in any known species.

The movement-spring of anthropology is man's tendency to rise and fall. It is a vast ethnical beat or periodicity from civilization to barbarism, and from barbarism to civilization once more, in the minutest acts of our minds is the same secret, logical, physical, metaphysical, as in the entire universe. Consciousness is the science of reason, and therefore the science of man, the very end of human existence, I think, is this, that in each life mankind may, but will not, order all their relations, spiritual, mental, or physical, with freedom according to reason. Man is an animal; but he is something more than protoplasm, begotten of spontaneous generation and natural selection. From soul to spirit, ψυχη to πνευμα, is a leap too great for nature to accomplish. This fact of itself points out irrefragable considerations against the absolute reality of the "*identical*," structural gradation of the human race from apes, according to mere exterior or interior resemblance, Ομοιος is not *idem* (like is not same), either in science or religion. Teleology is not a prudish virgin that weds only Heaven, and consequently produces nothing for the world.

In the recent Gulstonian lectures on "Body and Mind," delivered at the London Medical College, metaphysicians seem classed as of the

same order of philosophers as religious ascetics and maniacs! At least, Professor Maudsley says: "We shall make no progress toward a mental science if we begin by *depreciating* the body, not by *disdaining* it, as metaphysicians, religious ascetics, and maniacs have done." Still, he says: "It may well be, as De Quincey surmised, the opening of the book of the day of judgment shall be the unfolding of the everlasting scroll of human memory." (*Lancet, Report.*) Obviously, therefore, the learned professor does not himself choose to put off that which he cannot now make fit into the materialistic side of consciousness and organization. He carries us up his anatomical ladder, from gradation to gradation, aided mainly by Flourens' pigeon, higher and higher up to man, "the misinterpretation of whose mind constitutes what has *hitherto* claimed to be mental philosophy," and having truly declared that physical science cannot touch this question, he descends metaphysically, after all, from that physical review of comparative psychology.

The distinctive character of man, however pithecoid or ape-like, consists, I think, as a starting point, in the moral faculty of subordinating that same mental and physical organism to his exclusively human spiritual principle; and to this same spiritual principle man owes, not alone the faculty of speech, but that self-conscious intelligence of right and wrong, in an ethical point of view, on which depends, not alone the genius of intellectuality, whether in highest cultivation or lowest debasement, but his sense of responsibility to God, bestowed upon him for his eternal welfare here and hereafter, and that too in obedience to the fulfillment of a Divine purpose. This is man's true place in nature, and his only relations to the lower animals. The formation of a crystal, a plant, an animal, or a man, is, in the eyes of these anthropologists, an exclusively mechanical problem, degenerated anatomical characters of crania, in the different races of men; *e. g.*, dolichocephalic, prognathous, brachycephalic, orthognathous, round-headed, oval-headed, oblong-headed, microcephalic or headless, from the ethnological antipodes, differ in the same way only as do the skulls of lower mammals; as though the tender, the sweet and the lovely, in the physical world, were bequeathed to us as a legacy of mere temporary and sensual delight, that had no anterior or superior truth, beauty and purity, in the spiritual and eternal nature of our Heavenly Father, which cause our hearts and minds to vibrate, yea, our very souls to tremble and yearn for closer intercourse with Him from whom all science springs!

No crystal, plant, or animal yet known to natural history, however complex or wonderful the mechanism, can enter the spiritual domain set forth in the words, I think, I feel, I speak. Self-consciousness alone infuses itself into that problem. However rough the human casket, the jewel is there. Show the soul, the grand distinguishing prerogative of man, cultivate the mind, soften the heart, Christianize humanity, and the religiosity of the beast-child, the boy-wolf, or, like Ignatius Sancho and Gustavus Vasa, born in a slave-ship, wakens them up into the refined citizens of London or Berlin, and the literary as well as philosophical ornaments of modern Europe.

Bishop Hurd said of Lord Bolingbroke, that he was of that sect which, to avoid a more odious name, chose to distinguish itself by that of naturalism. Yes, a naturalist, two hundred years ago, was a persistent denier of *all* spiritual truth, an exclusive believer in natural phenomena, an investigator of nature and its laws; and the word remains true to its etymology at this moment, the mode of origin of the different species of men, historically or pre-historically considered, and their development from mammiferous quadrupeds are identical in all respects with those of the apes. The human ovum tells the same story as that of any other vertebrate animal; lizard, snake, frog or dog, and that, too, in every essential particular; nay, more, the science of anthropology is but the physical history of animal vicissitudes in which accident is the only design!

In the year 1671 *mental* action both in man and animals, was generally regarded as a mere function of the brain. The cerebral organ was then looked upon as a sort of gland, by which thoughts were secreted. The expression adopted by Professor Carl Vogt at the German congress in 1869, viz.: "Thought is a secretion of brain-protoplasm," had its certain prototype in the ancient days, when ideas were physically estimated as things entirely "of the earth, earthy;" material substances, in fact, closely allied to the bile, the saliva and the gastric juice. Free-will is but a kind of subtile matter, identical with the nervous framework of the human organism. It seems not to have occurred to these scientific materialists that function implies an act in which material changes can be weighed or measured; an act, moreover, in which mind in man and animals is *in no wise* concerned. The clay design of the skeptic in 1671 is the very prototype of the statue, afterward executed in marble, A. D. 1871.

I cordially agree with my late distinguished friend, Professor Waitz, of the University of Marburg, that the skull *has* been too exclusively considered the chief permanent mark of race; whereas, it is only in their entirety that physical characters *can* afford any scientific clue to racial peculiarities of heart and soul.

In every part of our being, beyond the limits of the physical humanity, there dwells divinity above disputing. Mind everlasting *precedes* the life of things material. Anthropologists have a strong love and deep conviction of the truth of beauty, but they are not guiltless of a partial abandonment of justice in denying the whole beauty of truth. The science of man, as it is commonly understood, represents, or rather aspires to represent, only the physical and mental aspects of human nature, that is to say, *one set of interests exclusively.* Such anthropologists aim to be the modern apostles of naturalism, or materialistic philosophy. According to their hypothesis, man, like the universe itself, arises out of modifications of matter, which are self-existent and self-directed. They repudiate the existence of soul utterly, and regard the functions of life, sensation and thought as pertaining only to the domain of natural history. On the contrary, I am of opinion, that true anthropology cannot recognize special phenomena of one class only, but the whole history of the human constitution in its integrity. Any other representation of the science of man is not just to eternal truth; it is, in fact, neither more nor less than a retrogressive movement, repugnant, I hope, to the spirit of our age and nation. Such scientific principles, we know, abounded at the period of the French revolution, and continued to agitate England for years. The religiosity of man was seared, as with burning steel. "Our fathers worshiped stocks and stones," our brethren worship flints and bones?

About that time, 1668, Dr. Cudworth published his principal work, "The True Intellectual System of the Universe," as a philosophical refutation of the atheistical tenets then, as now, widely prevalent all over England. Then, as now, too, science of the exclusive and bigoted physical sort was to effect the complete "*restoration*" of mankind, morally and permanently. There being no existence acknowledged except the fleeting present, natural knowledge was almost universally held to be the all in all; the "one thing needful." Mind and body, from dust to dust, was man's only pilgrimage in 1671, his nature and constitution were declared to be "*identical*" with those of animals, in origin, progress and destiny; and from

protoplasm to protoplasm is the highest and best march of science in 1871. The spiritual nobility of manhood is thus gone. In substance and in structure, in organ and in function; he is *one* with the brute, their common parents being spontaneous generation and natural selection. Spiritual being has no standing place in the modern science of man, past, present or future. Heroism is requited with misery; religiosity without heart or hope, vice adorned with coronets, the nobility of virtue in chains, want, disease, violence, bloodshed, meet us everywhere; the arm of science, withal, impotent and helpless to succor or to save; our creed, rationalism; the ape for an ancestor, man greater than his Maker, an earth without a heaven, and a world without a God. Vanity of vanities is this science of sciences.

Such scientific investigations are one-sided, and *ex-parte* men search for the *ego* when its habitation is desolate; meanwhile, the *ego*, having escaped, they deny its existence! "What man is there of you, whom, if his son ask for bread, will he give him a stone?"

Anthropology in London, Berlin, Paris, Vienna and Madrid, has disdained to draw upon any department of true spiritual knowledge which could throw light on the subjects which it investigates. Although Jews, Greeks, Germans, Indians, were never wholly destitute of spiritual culture, science deals in the swinish husks of physical phenomena alone, on which the soul of man must starve and perish; for we shall never fly by feeding on birds, neither will worms ever speak by feeding on us; no possible amount of human brains will enable the grass on our graves to reason. It is in passing from the region of scientific facts to that of laws which govern the human mind, that man can ever take his true position, either in the scale of nature, or that of spiritual beings. These men of science would have us believe nothing whatever in the philosophy of mind, whether belonging to what they call the different species of men-mammalia, birds, reptiles, fishes, and so forth, beyond the material cause and effect, the physiological function of an anatomical organ. Hemispherical ganglia are now held to be the sole identical representatives of ψυχή (soul) as well in the science of anthropology as in that of zoology; in fact, anthropology is *neo*-biology, and would seem to imply little else than a knowledge of the science of animal life, and the outward and visible forms of mankind; it soars to the loftiest heights of superstition, and in blindness of adoration, falls prostrate in idol worship. It is, as it were, a large terrestrial fungus, fetid and poisonous!

Whatever the classification, in the midst of past or present organic remains, mind, according to British and foreign anthropologists, is the attribute of brain-protoplasm only; in a word, their science *materialistic* in essence. Recent singular facts and coincidences appear to favor existing doctrines respecting the localization of the human intellectual faculties; but others, probably still more remarkable, are utterly opposed to them. It is quite certain that, in many of the lowest animals, no relation whatever can be discovered between astounding mental faculties and the physical conformation of their nervous systems, calculated, in any scientific way, to explain such psychical phenomena as wholly dependent upon some anatomical structure. Indeed, were such material relations traced to particular parts in the vertebrata, which has not yet been done, the same exegesis would by no means apply to the invertebrate kingdom, even more singularly endowed with instinctive and rational faculties, and in which the central organs of the nervous system are represented, not by brain-protoplasm, but by slender cords, or ganglionic chains, which, as we advance in the scale of animals, become double, and traverse the body as ganglions; still life and mind do not seem to require even the aid of this nervous arrangement in some of the lower zoöphytes.

Again, what sort of man does such anthropology represent? A double infant? Black women have white daughters, and white women have black sons; some are six-fingered, others are six-toed, with long ears, which they move like mules. Some have an excess of heads, legs, breasts, ears, together with other differences, internal as well as external. In addition to being born deaf, dumb and blind, from age to age, endless varieties of formation are transmitted and perpetuated for hundreds of years; madness, even to the nightly howling and barking like dogs; hare-lip, etc.; squinting; "horns" and "tails," with spotted skins, covered from head to foot with long silky hairs, like those of *Pithecus Satyrus*, or orang-outang, and of a reddish-brown color too; in fact, the silky hairiness of each entire body is a physical characteristic of the Australian aborigines; club-foot, hunch-back, and the gift of second-sight; physical and moral diversities, moreover, surpassing in extent those founded by the great families of ancient Rome; some men have skins like the bark of a tree, whilst the common integument of others resembles the pachydermatous covering of the elephant, or rhinoceros, looking and rustling like the bristles of a hedge-hog or the quills of a porcupine.

Some are giants, like a species of ape, others are dwarfs. Many girls, not Welsh, fast for fifty days; many boys sleep for a yet longer period. Some anthropological specimens live in the hollow of a stone, and subsist mostly upon dirt. They have great prominence of brow, with shortness of lower jaw, huge teeth, wide expansion of nostrils, great depression of nose at its base, and extreme width of mouth; in short, on the banks of the Orinoco, our fair sisters resemble, in physical degradation, some of the worst specimens of female gorillas. Must we, therefore, deem it unequivocally true, that millions of years ago primeval man walked on all fours, and obtained two legs by eating pipe-clay? I think not!

Animals exist without any central organ of the nervous system that can be either scientifically or truthfully called brain, and yet are endowed with unequivocal *mental* phenomena. To such an extent is this the fact, that bodies may be divided into several distinct and independent portions, still each separate and detached part is capable of manifesting special will, special faculties and special desires, even when the mental principle, which is certainly not of an exclusively material nature, has been divided and subdivided over and over again. Brain, ganglions or nervous cords, and what is more, even nervous matter diffused among the granulated bodies which form animal structure in some gelatinous zoophytes, afford no adequate solution of the scientific difficulty in which the advocates of an exclusive physical basis of life and mind find themselves, on this and many other occasions. Seeing these things are so, as a matter of incontestable fact, derived from philosophical experiments, after removing the cerebral hemispheres, and scientific observations upon animals yet lower in the scale of animated nature, how fare the statements of Professor Tyndall and others, so industriously circulated all over the kingdom, that mind is known to man "only" as dependent upon the physics of brain, and that, with this fact before him, the atheist is secure in his position against all attacks? Sensori-motor functions prove conclusively that mind has not its only seat of action in the cerebral organ itself; the mental principle is assuredly divisible in planaria, polypi and annelida; and, moreover, the naiades and nereides perpetuate their species by spontaneous bodily division. The truth is, mind, in these lower animals, is divisible, whether it be or be not identical with their vital principle; and in all abnormal conditions of psychical phenomena, the first point to keep in view is the nature of that structural change which converts healthy physio-

logical function into morbid pathological action, affecting the brain and nervous cords.

The spirit of man is a special creation, capable of union either with good or with evil. The anthropologists of these, our days, found societies in London, Paris, Madrid and Vienna, for the maintenance and propagation only of their own exclusive physical history of the human species. It is held to be no part of true anthropology to admit the existence of a religious and moral nature in the souls of mankind at large, the world over, upon any kind of testimony, however irrefragable, whether it be called spiritual, mental or physical. In their science of man, religion, itself, is a mere systematic idolatry and sordid priestcraft. Mythology and tradition, Hindu or Christian, the Rig-Veda Sanhita, is as truly spiritual or heavenly as the Hebrew Scriptures; and O-Kee-Pa, as an "inspired" ceremony of the Mandans, equal in value to either of the sacraments of the Church of England. Serpent-worship in India may be taught and illustrated in essays, papers and lectures of singular "beauty" and profound importance; but the fairest advocates of demonstrative religiosity, true in sentiment and fact, in principle or practice, in proving the spiritual realities of the universal heart and consciousness in every variety of the human race, are held only to "assume" the real in man, historically and pre-historically.* These necessary truths, as I conceive them to be, are held not to partake of the absolute; the inscription of Aristotle, τὰ μετὰ τὰ φυσικὰ, beyond the physical, in their opinion, is untrue. The science of man, to be worthy of its high and noble calling, must include human nature, as we find it, in every geographical distribution of the genus Homo; whether found in the drawing-room of an emperors's palace at Berlin, or in the natural caverns of Bruniquel, during the reindeer period; the wild pithecoid races of north-western Europe, spoken of by Latin writers, or the Eclectic Medical Society of Great Britain, now sitting in this hall. Absolute inequality of Neshamah is not demonstrable by physical characteristics. "To do justly, and to love mercy, and to walk humbly with thy God," is no part of the modern science of man, but is officially recognized and duly approved as an essential ingredient of the best quality, if not the highest form of true anthropology.

*In order to show the justice of this remark, it is only necessary to refer to the last report of the "British Association for the Advancement (*sic*) of Science," 1870, in which it is set forth that primeval man was scarcely removed from the condition of a wild beast (page 157), and a paper, amongst others, by myself, "*On the Anatomy of Intellect*" (page 151, *Idem*), controverting this view, is wholly suppressed, although read at the same Liverpool meeting. W. H.

At all events, I am of opinion, as I have ever been, that the science of Man, in the broad and catholic sense of that comprehensive and generic term, must include every department of human nature, whether regarded as pure or impure, mental or physical, moral or spiritual, or whatever the "science" may consist of, there will not be much true knowledge of man.* The superstitious parts of recent anthropology was assuredly known to Ezekiel (chapters xv. and xxxvi.), when carried away captive to Babylon 2,467 years before they were so gratefully appreciated in Rodney street; nay, more, either by the British Association for the Advancement of Science or the German Congress of Physicians and Natural Philosophers? Yes, and were witheringly denounced by him as a morbid perversion of that which is holy and good, sublime, beautiful and true in the nature and constitution of the human soul; he "caused Jerusalem to know her abominations," and that, too, in language of such bold, vehement and tragic dignity, in a gorgeous and majestic style of truthful, rich, oriental splendor, as will never be equaled by all the Ginsburgs and Inmans of Christendom, Jew or Gentile, to the end of time.

Such is the protoplasm of spirit! This is the true life in man; it cannot be seen, but it can be felt. Life springs from life in the spiritual as much as it does in the mental and physical world, and no scientific or philosophical experiments have yet proved that germinal matter, which has never lived, has still been seen passing into vitality. The human soul is real, though alike invisible and intangible. The physical characters of the ancient races of men were the same in form as those of A. D. 1871. The objects we have to deal with when we are reflecting or studying the science of mind, and therefore the science of man, are in absolute contrast with those we are investigating when we are scientifically observing visible and tangible things, or experimenting amid brains and bones. Things unseen are, from their very spiritual nature and divine constitution, wholly unextended, and have no temporal solidity, either for our hands to grasp or retain, as aëriform bodies in space. The visible are solid and useful occupants of places in time, whilst the invisible are non-molecular and immaterial, because destined for eternity.

The issue is this: All true anthropology has not only a moral

* Existing savages, in my opinion, are the degenerate offshoots of more civilized races; at least we have no adequate proofs that different communities have raised themselves, unaided, from the lowest to the highest forms of civilization. The Bushmen of Papua do not evolve Humboldts, Shakspeares, or St. Augustines. Physiology, zoology, and the natural history of man, concur to assure us, that our first parents were children of an Almighty Father, Sir John Lubbock and his Andaman "Savages," Professor Huxley, and his "Liverpool Savages," notwithstanding. W. H.

origin but a moral tendency, and I submit, with becoming deference, that no anthropologist can disprove this statement, however much "distinguished" for his knowledge of strange peculiarities observed by religious Muscovites, called Scoptsi, or the physical characteristics of ancient organic remains, force and matter, the plurality of the human race, the mythological tales of savage Africa, of the Esquimaux of Greenland, or the lacustrine habitations of "primeval" man, anti-missionary labors, pre-historic hut-circles, "cow-pox" in monkeys, or the "Contagious Diseases Acts," shell-mounds, tumuli, the phenomena of hybridity in the genus Homo, the negro's place in Liverpool or elsewhere, "religious" faiths embodied in ancient names, artificial deformities of crania, heredity, inequality, cerebral physiology or materialism—in short, he may know thoroughly well the whole anthropology of primitive peoples, however scientifically distinguished in all this one-sided lore—I repeat he is acquainted only with man in his physical and mental aspects. Wisdom abideth not in them; he cannot thus ascertain his true place in nature, or his true relations to inferior forms of life and mind. No amount of patient investigation, careful induction or encourgement of scientific researches, will ever establish a *de facto* knowledge of man, that is, man as he is, the world over, in every geographical distribution and variety. And why? Because the anthropologist in question has gratuitously and erroneously adopted a vicious, mutilated, and completely deformed method. The soul of man speaks all languages and in all nations; but its nature or constitution is purely spiritual. In physical history man is closely allied to animals both in flesh and blood; and with them he enjoys, somewhat in common, both mental and bodily phenomena. Every tissue and function of his structural organization may not only be strictly homologous, but likewise compounded of the chemical and physical forces of the universe. Still, the being who is the subject-object of all these inquiries in natural history is at the end thereof discovered to be an organism "without a soul." An organic being therefore "without a soul" is less than man; he is a beast, and his science is zoology and not anthropology at all.

Viewed in the exclusive light of physical science, the distinctions between plant, animal and man, almost merge into perfect identity; for example, the amœba is a shapeless mass of irritable protoplasm apparently devoid of all organs; yet it is an animal creature eating without a stomach, moving without muscles and without limbs, feeling without nerves, breathing without lungs, and nourished without

blood. There are also creatures, equally shapeless, composed of structureless protoplasm, alike irritable by virtue of their power to feel and move. Dr. Kühne, of Leipzig, has already built them up into vegetable muscles, and can make them lift a weight as though in grateful acknowledgment of their sensibility in feeling a galvanic shock; so that plants, like animals, move and feel; and in both the cycle of life comes round to a small dot in the ovule of the one as in the ovum of the other. Still, the life-story of the green-pond scum is not that of the grain of wheat, neither is the heart of a fungus that of a man. Spirit, mind and matter, are not all identical. If, in the world of materiality, the human body, like other bodies, is built up of protoplasm, there is yet a world of intellect, where all is mind to mind, as there is just as certainly a kingdom of spirits, where all is spirit to spirit. Identification of the human skull with the spinal vertebræ of apes does not account for pure reason, thought and religiosity in the soul of the former, and their significant absence in the brains of the latter.

The science of anthropology, as now taught, is neither more nor less than unmitigated materialism; our most spiritual states are "*but*" physical and chemical processes. Every fact of human consciousness, whether in the domain of thought, sensation or emotion, is "*but*" the corresponding result of a certain definite "*molecular*" condition of the cerebral organ; *i. e.*, given the molecular state of the brain, the corresponding thought may be scientifically inferred. The growth of the human body is "mechanical," says Professor Tyndall, and thought, as exercised by man, has its correlative in the physics of brain, and the materialist will be able finally to maintain this scientific position against all attacks. By the modification of pithecoid form man has naturally become what he is, says Darwin and Huxley. The "*most*" ancient races of men, we are assured, fashioned flint axes and flint knives, and bone skewers of the same pattern as those fabricated by the "*lowest*" savages at the present day, and the habits and modes of living of men have remained the "*same*" from the time of the mammoth and the ticorrhine rhinoceros "*till now.*" The scientific crown, therefore, awaits the anthropologist, who shall yet have the good fortune to discover, in still older strata, the fossilized bones of an ape more anthropoid or a man more pithecoid, with the possible epitaph, "here lie the mortal remains of the intermediate vertebrates." Physical conditions do *not* account for organized intellectual *differences* from the *same* cell. In a recent

course of "Lectures on Man," delivered in Clayton square, I have taught that there exist the strongest reasons for establishing a close anatomical and physiological similitude of structure and function between *homo sapiens* and the anthropoid mammalia; *e. g.*, as with no other vertebrates the optic nerves open directly in the cerebral hemispheres. Hence man and ape perceive their sensations alike, but there is no *identity* in nature; *i. e.*, I acknowledge an ideal series between types, but not a lineal series, physically or molecularly.

Nations rise and fall, yet there are races which certainly were never savages. Whatever may be said about the past physical history of mankind, in regard to skulls, worked stones, tumuli, caverns, flints, and bones, race-legislation, mythology, superstitions, phallic worship, or comparison of man with the lower animals, as being the *essentials* of modern anthropology, religion must be duly considered in every true science of man, and not superstition merely. Religion, in my opinion, cannot be scientifically left out of condition unless man himself be excluded. Religiosity is the anthropological character; even the psychological characters of the different races cannot be adequately investigated, without discovering the inexorable influence of monotheism, or polytheism, upon them. That man is diverse in origin, and diverse in kind, and derived naturally from lower animals, is, like the statement that brain originates mind and thought, a molecular phenomenon, an hypothesis in each case as old as philosophy itself. These theories have their day, are forgotten, as in 1671, and revived in 1871. Their authors are usually men of large intellects but small hearts.

Did time permit, I could demonstrate almost every recent theory, now so assiduously propagated as "science of man," to be found in the ancient speculations of former materialists throughout the history of philosophy, from the ape-origin of man to primordial utricle, molecular machinery included. But supposing it "*proved*," which has not yet been done, that every living being had its physical basis in the same cell or the same nucleus, protoplasm, the all in all, nevertheless experiments in physics are inconclusive, because new consequents demand new antecedents.

Spiritual philosophy enables its faithful and devoted alumni to look and smile on the raging tempests of modern science, with all its fussy and evanescent eurekas, well knowing as they do that the true cause of the variety of classes, families, genera, and species of man, animal or plant, resides not in the physical and chemical phenomena of the germ, or life-matter, but in the divine idea, or nature, "after their

kind," implanted in each. Natural science must be considered philosophically. Man is endowed with a spiritual nature, or moral faculty, besides the material life which he has in common with the rest of creation. This truth touches consciousness.

Recent writers on the physiology of matter are entirely mistaken, I submit, in viewing the brain, spinal cord, or sensory ganglia, as exclusive agents in all intellectual and mental processes, of whatever kind. I do not believe that impressions or ideas are absolutely dependent upon the physics or chemistry of nervous centers. The simple operation of will is certainly exempt, in numerous animals, from any such fettered connection with material processes, and as regards the immediate dependence of the human soul upon the organized structure of brain-protoplasm, it is independently active, rather than physically acted upon; its association with ganglionic nuclei of the senses is often both circumscribed and partial; in fact, the anatomical basis of thought is but a temporary instrument subserving spiritual functions. The nature of mind no physical science is competent to interpret or explain.

Time after time the light of speculation at the College of Allopaths has left one landscape to shine briefly upon another, always darkened by deepest shadows, like giant forms of vanities on their way to hopeless ruin. There is need of Eclecticism. This same Allopathic College is always orthodox; having formerly denounced vaccination, *e. g.*, branded Jenner as a quack, and refused him a license to practice, it now calls upon the public to be vaccinated, and re-vaccinated, and thank God for the blessings of animal poison.*

The proper study of mankind (by which I understand its synonymic expression, true anthropology) implies an adequate knowledge of the spiritual, mental and physical history of the whole human race, whether sacred or profane.† *Homo sapiens* I interpret to signify a deathless

* Apart altogether from mere theory, and guided solely by actual observation, I protest, that the *compulsory* vaccination act is neither more nor less than a contagious diseases propagating act. The so-called committee of inquiry has really declined to inquire into its wholesale murders; and personally knowing well the antecedents of both men, I say, that to prefer the testimony of Dr. Gull to that of Dr. Pearce is simply to *gull* the British public.—W. H.

† Plato distinguished the *νους nous* or mind from the *πνευμα pneuma* or spirit; and Paul uses the phrase, "*Το πνευμα, και ψυχη, και το σωμα,*" spirit, soul and body. Again he says (1 Corinthians xv, 43.) "There is a psychical body and there is a spiritual body." The sixth and eighth verses of the third chapter of the Gospel according to John, with the additions made to the former, show, also, a similar sentiment: "That which is born of the flesh is flesh, because it is engendered from the flesh; and that which is born of the spirit is spirit, because God is spirit and it is engendered out of God. The spirit (*πνευγα pneuma*) breatheth where it will, and thou hearest its voice, but knowest not whence it cometh or whither it is going; so is every one begotten out of the spirit" (pneuma). The trinal division was the ancient one.—A. W.

spirit, clad in organization, and, therefore adapted divinely to the materiality of this planet. Man is the incarnation of thought; and the protoplasm of the elementary tissues of his temporary physical organization, ganglionic, sensory, or motor, is no more the *man himself* than were these stones when in the quarry, Hope Hall, Liverpool! The history of humanity tells us of an involution of carbon, hydrogen, oxygen and nitrogen, together with something more struck into spirit! Every organ and function of *T. Gorilla* may be strictly homologous with those of *homo sapiens;* still, man is not of the brute scientifically. I resist the conclusions of modern anthropologists as utterly undemonstrable, that the natural history of the human race, and that of anthropoid mammalia, is like in protoplasm, and therefore "identical" in faculty of nature. Neither Tyndall nor Darwin, with Huxley and Maudsley to boot, whether molecularists or naturalists, are able even now, in the year 1871, to level up the difference between organic and inorganic, or between genera and genera, species and species. Scientific differences yet persist. A natural growth from the moss to the monkey, excludes man, the deathless, from its involution, for he is, as I have said, the incarnation of thought, founded in the divine idea, and therefore independent of natural selection; terrestrially, morphologically, or teleologically. Yes, spirituality is the essential gauge in true anthropometry, and is not the exclusive offspring of chemical force or material substance. Religiosity is the ultimate fact of human, as contradistinguished from animal organism. Dependent upon no *ex-parte* physical basis, but as the bright gem in the crown of human life it scatters the dark and gloomy perplexities that cloud our earthly horizon. Physico-zoic, or pneumatico-zoic, these things, in all race-amalgamation, are cause and effect; therefore, we have spiritual phenomena no less certain than those of physics, geometry, mechanics or comparative anatomy—

> "I argue not
> Against Heaven's hand or will, nor bate a jot
> Of heart or hope, but still bear up, and steer
> Right onwards."

Lastly, I hold spiritual life to be the derivative of spirit, and justice to truth constrains me to recapitulate. True anthropology is the synonymic of physical researches into the history of our species, and the spiritual, mental and molecular constitution of man fairly represented. The question before us has two essential factors: the

evidence in each department, and the mind to judge rightly of the evidence; rigid experimental inquiry, rationally conducted and without bias. The "I feel," "I think," "I speak," are non-molecular elements which form the only avenue into the temple of science; in themselves, also, they are the foundation or intellectual basis of physical and metaphysical, moral and religious knowledge. Were all the orangs and the gibbons, the chimpanzees and gorillas, collected together, and put into one being, they can neither constitute humanity proper, nor the neshamah of lives, for the true root of animated nature is in the supersensible and Divine—past, present and to come. The conclusions of necessary and demonstrated truths are not mere optional scientific opinions, to be embraced or not, as anthropologists please; they are insuperable necessities of thinking, to understand and appreciate which is to assent to them. They appeal not to the feelings of men, but exclusively to their catholic reason. If anthropology is to include man, it must not exclude the history of his spiritual constitution. Whilst acknowledging that there is a period of development, when the entire organism of every living thing consists of a particle of jelly, throughout each classification of the animal and vegetable kingdoms; of one molecule of clear, transparent, structureless matter, whether destined to be plant, mammal or man, a center of force capable of moving in all directions, which undergoes division and subdivision as it grows; and while in all these material things most wonderful chemical and physical living changes occur, let us never forget that there are altogether other astounding actions which constitute the matchless difference in nature or kind; actions as essential as they are peculiar to each different life and mind, quite of an immaterial eventuation, and capable of overcoming, by the will of God, in the constitution of man, all such physical and chemical attractions of force or matter; this, the spirituality of each one's real innermost being, is the touchstone of humanity, and is neither deprived of its being nor its active reality by the death of protoplasm. In short, truths, spiritual, mental and physical, are each and all exhibited to our view by the light of their own evidence, even as "one star differeth from another star in glory." Thus directed, your penetrating insight or professional sagacity will rightly apprehend the constitution of each human faculty, and duly exhibit to your own souls a lasting monument of scientific conquest, in that deathless realization of ideal harmony, which is at once the root of true knowledge, the fountain of intellectual pleasure, and the condition of wise thoughts and virtu-

ous deeds. Leaving that sanctuary of minuteness and of power, where molecules obey the laws of organic existence, and build up, in secret, the forms of things external, or visible, the spiritual philosophy of pure reason will safely guide you beyond the sphere of nature, pointing, as it does, toward those serener heights of eternal being,

> "Where never creeps a cloud, or moves a wind,
> Nor ever falls the least white star of snow,
> Nor ever lowest roll of thunder moans,
> Nor sound of human sorrow mounts, to mar
> Their sacred everlasting calm."

ERRATA.

Page 97, line 4, instead of "dropsy" read "drooping."
Page 145, line 9, instead of "O. W. Henry" read "Oliver Wendell Holmes."

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A WORD FROM THE SECRETARY.

The Transactions for 1871 have been prepared with care and diligence, although an attack of pneumonia, and consequent prostration, greatly incapacitated the Secretary while engaged at the work. He feels that some explanation is necessary, in justice at least to himself. There has been a defect in arrangement of the papers, owing in a great degree to the tardiness with which several of them were furnished. The order of arrangement was not preserved as strictly as he desired. By reason of some oversight at the post-office or elsewhere, several papers were lost which had been duly transmitted to Albany, among them the admirable report read by Dr. W. D. Jones, at the Annual Meeting, and a paper by Dr. Fenner. The writers would have been asked for copies, but the fact of the loss was not ascertained in time. But with these drawbacks, so annoying to an editor who is sensitive about the doing of his work well, the Fifth Volume of Transactions is in no respect, scientific or literary, inferior to any preceding volume. It will constitute a valuable addition to our medical literature.

A. W.

NEW YORK, *August* 27, 1871.